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FOR REFERENCE
Not to be taken out

The Journal
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Vol. LXII. JANUARY, 1932. No. 266.

EDITORIAL.

Retrenchment.

The melancholy forebodings of the leading article in the October number of the Journal have, alas, proved only too well founded. The ten per cent. cut in the pay of all officers and officials is an accomplished fact, and the shorn lambs are now adjusting themselves to an economic blast that shows little signs of being in any way tempered to their nakedness. The essential difference between these reductions in India and those at Home is, that while the cost of living in Great Britain has of recent years steadily gone down, it has in this country just as steadily gone up. Now have been added the new custom duties and the adverse exchange which raise at a bound the prices of many things which are a necessity for Europeans in India. There is only one way to meet this unhappy combination of events and that is to grin and bear it—and reduce our standards of living. This is what the Services have done. There has been extraordinarily little grumbling, but this must not be taken to mean that the cuts are not felt—and in some cases, especially those of married officers with children to educate, felt severely. The reductions have been accepted as unpleasant but unavoidable and as part of a sacrifice required for India and the Empire. But it must be remembered that this ungrudging spirit is based on the assurance that the cuts are temporary, to be replaced immediately the emergency which gave rise to them is passed.

As far as the Army and Royal Air Force were concerned a cut in pay was unavoibable; military officers could not be exempt from a

reduction applied to all civil officials. The grant for military expenditure in 1932-33 is to be below that of the current financial year by no less than Rs. 525 lakhs, a sum that represents the cost of about 80 Indian Infantry Battalions. Of the missing Rs. 525 lakhs the cuts in officers' pay will produce only 75, the rest must be found elsewhere. In deciding what reductions and economies can be made to cover this large deficiency certain principles have been borne in mind. The first of these has been to avoid as far as possible the disbandment of units. The fighting forces in India have already been reduced to a level which leaves little margin of safety over their commitments; further reductions on any considerable scale would definitely endanger that margin. Again, disbandments inflict the maximum hardship on individuals who are thrown out of employment at the worst possible time, and induce a general feeling of insecurity amongst those remaining. Other guiding principles have been that economies likely adversely to affect morale have been avoided: only those accepted which retain fighting efficiency as far as possible unimpared; and existing organisation for war disturbed to the least degree.

In spite of this it has unfortunately been found necessary to disband two Indian Battalions with their Training Companies, two Railway Companies of Sappers and Miners, two Camel Transport Companies, and to reduce each British Battalion by one non-commissioned officer and eighteen men. In addition the re-equipment programme of the Army has had to be postponed, many staffs have been reduced, headquarters re-organised or amalgamated, and the pay of most British and some Indian other ranks reduced in various degrees. Altogether it is safe to say that few, if any, of the charges in the defence budget have escaped the closest scrutiny. Reductions are being made under some two hundred different heads, and the search still goes on. It is here that every officer can help by thinking out savings in his own unit. The cumulative effect of small savings is often overlooked. For instance it is hoped to make an eventual saving of several thousands of rupees by arranging a more economical supply of the tins now issued to hold earth for fire-fighting purposes, and an estimated economy of Rs. 18,000 per annum by using second hand wire instead of new for baling fodder. When it is recognised that the combined effect of a number of such savings, seemingly

trivial in themselves, may be to preserve a fine battalion from disbandment no one can fail to be on the look out for even the smallest economies.

* * * * * *

Mobility.

While economy undoubtedly occupies the leading place in service thought these days, Mobility, at least in India, seems to run it a close second. Wherever service "shop" is talked sooner or later the question is raised, "Is the Regular Army in India as mobile as it ought to be for the tasks it is and may be called upon to perform?" Then the discussion becomes really earnest. To do its part in stimulating this discussion which in itself is a most healthy sign, the Journal has in recent editions published various representative articles selected from the many received on the subject.

It has been asserted that the Army, in spite of, or rather because of, modern developments, has in the last twenty years grown progressively less mobile, and, whether we accept this as true or not, most of us feel that it could with advantage be made more mobile than it is. As so often happens it is comparatively easy to decide what is desirable, the difficulty is to agree on how the end should be achieved. One school of thought plunges boldly for the "de-regularization" of the Indian Army. They picture the wretched sepoy weighed down physically by a multiplicity of weapons and bemused mentally by half understood systems of co-operation designed to meet every phase of scientific European warfare. They argue that the Indian Army's main if not only field of future employment is the North-West Frontier and that, to meet his Pathan adversary on equal terms, the sepoy should be as lightly equipped as he is and trained only in the tactics required to beat the tribesman at his own game. They point to the undoubted efficiency and mobility of the Scouts in their every day duties of 'watch and ward' over the Border. If the Scouts can roam at will over wide areas, covering their twenty to thirty miles a day, why cannot the Regulars? "Because," answer the advocates of 'de-regularization,' "the soldier drags behind him a huge tail of impedimenta and is taught to move only under an elaborate criss-cross of covering fire from all sorts of weapons. Scrap the lot, and let him loose on the hill side with a rifle, fifty rounds, a waterbottle and two chupattis!" But it is not quite so simple as this. No

doubt the regular soldier thus relieved would be better able to perform the functions of the Scouts than he could at present—but is he required to undertake the functions of the Scouts and has he no special functions of his own? There is no doubt a certain overlap between the two forces and suitably equipped regulars could carry out some of the duties of the Scouts, but for local knowledge and as a force at the immediate disposal of Political Officers the regular can never replace the Scout. On the other hand the fire power and striking force of the regular can be replaced by nothing else; they are, as the tribesmen are the first to admit, the decisive factor. Hence it follows that while every effort should be made to increase the mobility of the regular troops, both strategic and tactical, it would be unwise to do so at the expense of their fire power. Similarly any attempt to enhance the Scouts' fire power at the cost of their tactical mobility should be resisted.

The ideal to be aimed at is to get the maximum value and the greatest economy by using both forces in the closest co-operation. Experience has shown that the inclusion of some platoons of Scouts in a Column is of the greatest advantage; the fire power of the regular enables the Scout to retain his mobility in the face of opposition and the local knowledge and reconnaissance capacity of the Scout are at the disposal of the regular.

This does not mean that a regular force, however small, should never divest itself of any of its fire power to achieve greater mobility. It is only against strong opposition that it will require its utmost striking power; for the normal peace time watch and ward regular troops might often with advantage reduce their armament and baggage to the level of that of the Scouts. It would be to everyone's benefit if it became a normal incident for a lightly equipped regular company and a platoon of scouts to go on "gasht" together. The two forces will have to work together under one control in war; the more opportunity they have of getting to know one another and of learning from one another in the comparative peace of the trans-border the better.

* * * * * * *

Ordinances.

Government by ordinances is bad, but there are some things a great deal worse, and foremost amongst these, especially in India, is no government at all. The preservation of order, the detection and punishment of crime, the collection of

revenue, the development of commerce, and the progress of the country in civilization, can only continue under the ordinary law as long as Government has the active support of a majority of citizens. When for any reason, such as fear of a violent minority, that support is not forthcoming over a considerable area, a Government must either give up governing or take special powers to enable it to maintain or to re-assert its authority. There can be no question that in India there has been and still is a real danger of certain districts passing completely out of the control of Government into the hands of violent and unscrupulous agitators whose first object is to destroy all legitimate authority.

The Ordinance in Burma was introduced to meet an armed rebellion whose strength lay in an almost incredible and fantastic cruelty which terrified the defenceless country side. In Assam, the Chittagong Ordinance was directed against a small party of assassins whose continued existence threatened all peace. In Bengal, a series of particularly dastardly political murders, the terrorization of witnesses and the impossibility of maintaining control in certain areas through the ordinary law, made the application of an Ordinance unavoidable. In the United Provinces, the Congress leaders have organized a typically cunning attack on the Government revenue by inciting peasants to refuse their rents to landlords, who in turn will be unable to pay their taxes. Any failure to meet this dangerous situation by prompt action under wider powers than are given by the ordinary law could only result in widespread and violent disorder.

The need for these Ordinances is self-evident and it is useless to pretend as the Congress does that the Ordinance produces the violence. It is manifestly the opposite; no Ordinance has been issued until violent and illegal agitation had already progressed so far as to be beyond the control of ordinary methods. The Government by meticulously observing the terms of the Delhi Pact had tied its own hands and those of its subordinate officers in dealing with sedition, while the Congress, unhampered by any such scruples, continued unabated its incitements to anti-Government action which could, as it well knows, end only in violent disturbance. Symptomatic of its attitude has been the fact that no Congress leader has ever come out with a completely unequivocal condemnation of political assassination. Pacts are all very well if both sides observe them; if neither side

observes them no great harm may be done; but when only one side observes them the sooner they are denounced the better.

Mr. Gandhi's ridiculous attitude towards Government which may be summed up as, "I am a very humble, holy man and, of course, I abhor violence, but if you don't do what I want, by love, I'll give you hell?" has at last been met by the proper answer. For the first time Government has taken the offensive against its enemies. It is perhaps too early to say that the Congress has been completely broken, but already the effects of the firmness shown have been beneficial beyond most people's expectations. Meanwhile it cannot be too often reiterated that no decent law-abiding citizen has anything to fear from these Ordinances which are directed solely against those engaged in dangerous and subversive activities.

* * * * * * *

The Axe.

It was to be hoped that the Indian Army had seen the last of axings—at least of the compulsory kind—for many years. But it was not to be so. Army Instruction (India) No. 132 of 1931 is the latest of the efforts to get rid of surplus officers, and for the first time there is no voluntary element in its terms. While compulsory retirement will inflict hardship on certain individuals, there can be no doubt that from the Service point of view the best method and the fairest is to dispense with the least efficient in all ranks. These retirements are only one phase in the all-pervading retrenchment. Units have been disbanded, staffs have been reduced and officers have thus become surplus to requirements. In happier times it might have been possible to retain some of these officers in the hope of their gradual absorption into vacancies, but the financial situation has left no option but to reduce rapidly to the authorised establishments. An attempt has been made to decrease the number who will have to retire compulsorily by extending Army Instruction (India) No. 101 of 1930 to certain classes of officers up to now excluded from voluntary retirements under its terms. It is doubtful, however, whether a sufficient number will take advantage of this and, even allowing for those that do, there will probably still remain some ninety officers to come under the axe.

The officers to be compulsorily retired fall into two categories, those inefficient in their present rank, and those considered to be unfit for promotion in due course. The latter will receive the same

terms as those who retire voluntarily within the next four years under Army Instruction (India) No. 101 of 1930. The former, that is those inefficient in their present rank, will receive as a maximum, if over fifteen years service, pensions rising from £170 per annum, or, if under fifteen years service, gratuities at the rate of £110 for every year's service. These terms, taking into account the capitilized value of the pensions, are much the same as were offered during the compulsory retirements of 1922. They are stated to be the maximum terms, but it is to be hoped that, with the exception of a few individuals who may have forfeited a claim to them through definite misconduct, the great majority of the officers concerned will receive them. The choice of the officers to be retired rests first and naturally with their commanding officers, who have already been asked to submit special reports. These reports will pass through "the usual channels" to Army Headquarters where a committee of senior officers will examine them and make a final recommendation after a consideration, not only of the special reports, but of the officers' confidential reports and other records over a number of years.

The necessity for this latest axing is as regrettable as it is unavoidable, and our sympathy goes out to the majority of those who are to suffer from it. It is poor consolation to point out that they are in the same situation as innumerable men in other walks of life, but it is permissible to remind them that few discharged employees in civil life would receive such terms. Granted the necessity for the reductions, it is difficult to see how a fairer choice could be made and it must be admitted that to give much more generous terms would be to put a premium on inefficiency. The whole business is unpleasant, even for those not directly affected, and we can only hope for everyone's sake that it really is the last of the axings.

* * * * * * *

GOLD MEDAL PRIZE ESSAY COMPETITION, 1932.

The Council has chosen the following subject for the Gold Medal Prize Essay Competition for 1932 :—

" Disarmament, and its effect on the Foreign Policy of the British Empire."

The following are the conditions of the competition :—

(1) The competition is open to all gazetted officers of the Civil Administration, the Royal Navy, Army, Royal Air Force and Auxiliary Forces.

(2) Essay must be type-written and submitted in triplicate.

(3) When reference is made to any work, the title of such work is to be quoted.

(4) Essays are to be strictly anonymous. Each must have a motto, and, enclosed with the essay, there should be sent a sealed envelope with the motto written on the outside and the name of the competitor inside.

(5) Essays will not be accepted unless received by the Secretary on or before the 30th June 1932.

(6) Essays will be submitted for adjudication to three judges, chosen by the Council. The judges may recommend a money award, not exceeding Rs. 150, either in edition to or in substitution for the medal. The decision of the three judges will be submitted to the Council, who will decide whether the medal is to be awarded and whether the essay is to be published.

(7) The name of the successful candidate will be announced at a Council Meeting to be held in September or October 1932.

(8) All essays submitted are to become the property of the United Service Institution of India absolutely, and authors will not be at liberty to make any use whatsoever of their essays without the sanction of the Council.

(9) Essays should not exceed 15 pages of the size and style of the Journal, exclusive of any appendices, tables or maps.

MOBILITY.

By "Light Infantry".

I. Introductory.

During the past year there has been much discussion on the subject of "Mobility," and the thoughts of officers generally seem to have been directed towards measures to make the Army more mobile. This is a healthy sign.

Certain critics contend that we are still suffering to some extent from the influences of trench warfare and of the deliberate attacks of the Great War, and that many of our methods are inclined to be too slow for warfare in Asia. Others consider that we are overburdened with transport and equipment. Such ideas are welcome, as anything that will lead to greater speed of manœuvre and rapidity of operating is to be encouraged; provided of course that efficiency is unaffected thereby.

II. The effect of modern inventions on Mobility.

(*a*). Increased mobility can be obtained, up to certain limits, by increased mechanization. These limits are firstly finance, and, secondly, the terrain over which the Army may be called on to operate, and which may be in many parts impassable for mechanized forces. There are many pros and cons, and a satisfactory solution is not easy, and it behoves the higher authorities to proceed cautiously and not commit themselves prematurely.

There is always the danger of over-mechanization. When the emergency arises, one may long for the old mule transport which may then no longer exist; one may find oneself hung up for want of it on operations, and a decisive advance may have to wait until a track fit for mechanical transport has been made, thus causing undesirable and possibly dangerous delay.

(*b*). Then there is the Air. An article entitled "Modern Mountain Warfare," published in the January 1931 number of this Journal showed in considerable detail the facilities which increased support by air forces will give to land forces in such operations. The article was full of ideas and provided much food for thought (without which

there can be no progress) ; although some of the ideas, such as paper jerkins on cold wet nights *vice* blankets and dependence on local enemy supply for transport, and for meat in local exchange for tea, were doubtless not intended to be taken too seriously.

In the development of the Royal Air Force there are, it is considered, great potentialities towards the more mobile conduct of operations against a semi-civilized enemy (in undeveloped countries). In the course of time it is reasonable to believe that the Royal Air Force will be able to supply a force from the air, and when that day comes the drag of the long line of animal Lines of Communication, and consequently a great deal of animal transport with Columns, will be eliminated, and the mobility of such Columns considerably increased. The Royal Air Force is making progress in this direction. To render further assistance it should be able to pick up casualties in the middle of a fight and evacuate them. This evacuation of casualties is a very serious problem in all warfare against an uncivilized foe. If one could only leave one's casualties on the ground and count on their being evacuated as is done in civilized warfare, one could go anywhere and take on the enemy at his own game. This point is often forgotten. It affects every phase of uncivilized warfare. But, as your Editorial pointed out, the Royal Air Force is a very expensive arm. Under the many varying conditions of service in India one cannot do away with animal transport entirely and replace it by Royal Air Force Troop Carriers. One must be used to supplement the other. What must be aimed at is the reduction of animal transport by making use of modern mechanical devices.

(*c*). The third aspect in the increase of mobility is to make the troops themselves, their method of training, their transport, equipment, and general procedure in the field more mobile. It is with this aspect that it is proposed to deal to some slight extent in this article.

In the same (January 1931) number of this Journal referred to above, there appeared another article on much the same subject, "Babu Tactics," by "Mouse." The general ideas expressed in this article are endorsed by many officers one meets. There appears to be a feeling that, as the article indicated, the Army in India, for its special rôle, has become too regularised and encumbered, and is too much trained to fight a European foe, provided with masses of artillery and mechanical aids, which it will never, it is contended,

have to do. Is this theory correct? Probably not. Surely no one wants an army trained on North-West Frontier mountain warfare lines only. This would be truly retrogade. Then indeed would it become a second rate army. All the cost of higher military education, Staff College and modern equipment, could be economised if we are to limit our horizon to the hills of the Frontier. Even though it may be years before the Army of India fights again outside Asia, there are plenty of potential enemies in Asia, whom it will require all the inventions of the highest form of military science, training, organization and equipment, to overcome.

Any tendency towards specialization for mountain warfare operations on the North-West Frontier must be resisted. These are a very small part of the Army's possible commitments, and specialization means a waste of part of our already very small army. Mountain warfare is much the same as any other kind of warfare, with a few grains of common sense added. The writer has never found that officers of the British Service, who come new and fresh to it, find any difficulty in picking it up. There must be no specialities in personnel, training or equipment.

As for the Mahsud's remarks quoted in Mouse's article, that "300 Mahsuds would take on any regular battalion," they could and always would have given it a bad time if isolated in the Waziristan hills, because a regular battalion would be tied to its Lines of Communication and its wounded, while the Mahsuds would have neither encumbrances to contend with. Read Callwell's "Small Wars." Regulars have always been at a disadvantage when dealing with guerillas to start with, but they have always overcome them in the end, thanks to their training and discipline. There is much to be said for mobility, but it is not everything.

III. The experiences of the summer of 1930.

After the Afridi incursions into the Peshawar District during the hot weather of 1930, many jumped to the conclusion that the regulars were not mobile. The reason for this was that during these two incursions two to three thousand Afridis invaded the Peshawar District and escaped after one day in June, and after one week in August, without being annihilated; though on each occasion they lost heavily, much more heavily than Afridis have ever been accustomed to lose before. Owing to these incursions there was general outcry

for more irregularity ; the Infantry were too hidebound, too weighed down by their many weapons and too complicated in their methods to take on the Afridis successfully. Why were they not more like Scouts ? It was even stated that Scouts were brought to Peshawar to do what the Regulars could not do ! Many uninformed people believed this. But the whole matter was misrepresented, and the criticism misinformed and inaccurate.

Nevertheless, a slur was cast upon the fair name of the Regular infantry, which was quite unjustified. The troops who were undergoing the hardships of hot weather operations round Peshawar, Shabkadr, Mardan, Charsadda, Tangi and Swabi, and were undergoing them cheerfully and with great determination, were never mentioned in the papers. They seemed to have been forgotten. Facts fail to disclose any such contention of lack of mobility on the part of the infantry. They did everything which was required of them, and would have done more, if a less nebulous enemy had provided an objective.

It is only fair to the troops that the facts should be known.

Both in June and August it was reported that about five thousand Afridis had entered British India. Plans of Operations must be based on the information one possesses at the time ; they cannot be based on what is learnt afterwards. Obvious as this may appear, it is often overlooked. Although the figures given were probably an exaggeration, the Afridis did infiltrate into the District like a swarm of locusts, and hid. They hid in the villages, the gardens, the nullahs, and the crops which in August covered the whole country six to ten feet high. The local inhabitants helped them by blocking roads with trees, by cutting communications, by hiding them in their villages, in cellars, and in gardens, by feeding them, and even lending them their clothes. Martial Law had not then been proclaimed, consequently the villagers were immune. A few occurrences will illustrate the situation. The villages close to the Afridi border are inhabited largely by domiciled Afridis, up to ninety *per cent.* in some cases. For instance one of the Afridi Khilafat leaders, who was afterwards killed by a shell on the Khajuri Plain, and his brother, owned land and property in a village ten miles within the border. Such being the case, accommodation in this village was always available for them ; and this the unholy brothers utilized as advanced headquarters.

In June, an informer reported that a gang of forty Afridis were in a certain village, and this was surrounded by the troops. Frontier Constabulary searched the village. The headman, who had an Afridi wife, swore there were no Afridis there, and none was found. The informer was marched away to gaol, but it afterwards transpired that the Afridis were there the whole time. In August, eighty men were seen near Bara in a graveyard behaving in a most suspicious manner. A battalion was sent to investigate, but the men swore they were villagers burying a dead man and this was confirmed by the village headman. After the battalion had gone on, the subsequent conduct of the party made it certain that they were Afridis.

Several times, when a column went out, smoke signals were used by the villagers to warn the Afridis of the presence of troops. These signals were taken up from village to village, up to the border. Those who know the Peshawar Vale country will realise the difficulties with which the troops had to contend in order to comb out a skulking enemy, actively aided and abetted by the local inhabitants. Field artillery, wheeled transport and six-wheelers could not move far off the main roads or off the few tracks. Pack transport could traverse it with difficulty.

The Afridi would not come out and fight. It is difficult to fight an enemy who will not join issue. It was difficult to understand their Congress-fed mentality. On two occasions they refused to fire on Indian troops at close range when they had the chance, shouting out that they were not fighting them. Only on one occasion did they see their chance and take it. To carry out an operation, one must have timely information and an objective. With hostile inhabitants, the information was never exact or in time. In the first Afridi incursion on 5th June, the District Commander could not commit his troops to action before he knew where the enemy was ; and consequently the operation could not commence before 11-30 a.m. of a hot weather day.

Time after time the cavalry and infantry columns went out to drive an area of country and comb out the enemy, often staying out for two or three nights. Every effort was made to render the infantry of these columns mobile, and the greatest care was taken in working out the administrative details of equipment, rations, water, to make the load on the men in the heat as light as possible, and to cut down

transport for the sake of rapidity of movement. Fuller details of this are given later. No kits or tents were ever taken. The Columns were invariably ordered out at very short notice (frequently late at night), to start at daybreak, and consequently excellent practice was afforded in the rapid issue of orders.

Day after day the troops were operating throughout the heat of a Peshawar hot weather day. They always marched, since at that time the calls on Government mechanical transport were too heavy to allow of mechanical transport for the movement of troops. Although they never had the chance of giving the Afridi a real defeat, the latter continually lost heavily from gun fire, rifle and machine gun fire, and air action, and he did no damage except on one minor occasion. Thus, the troops did all that was ever asked of them and did it well. One cannot speak too highly of the spirit and devotion to duty shown by all troops, both British and Indian, all through that hot weather.

For those in authority, both Civil and Military, it was a difficult situation, and one which now affords an interesting study. How, in the circumstances portrayed, could the Afridis have been severely punished for their temerity in invading British India? All along the Frontier, both cis-and trans-border, there was grave unrest and danger of a general rising; not only in Mohmund country and far north of it in Mamund and Sallerzai limits, but also in Tirah, Orakzai and Chamkanni country, in the Kurram among the Afghan border tribes, and finally in Waziristan. Inside the Border, Peshawar, Kohat, Bannu, and Dera Ismail Khan Districts were all suffering from the effects of active sedition and unrest.

Only in Swat, Dir and Buner did two strong rulers keep their people quiet and loyal. Fortunately all the troubles did not come to a head together. In dealing with tribes beyond the reach of land forces, *viz.*, Mamunds, Upper Kurram, etc., the Royal Air Force did admirable service. In the Peshawar District the situation was particularly bad. The City was seething with sedition and required a permanent garrison of troops; the Red Shirts were openly defiant and were parading and holding seditious meetings all over the District; the Mohmund lashkar was sitting on the Border hills threatening hostilities, and the Afridi lashkar was hidden in the villages inside the District.

The garrison of Peshawar had to protect a perimeter twelve miles in circumference including the aerodrome, to hold the City and Fort,

and to guard the Supply Depôt which has a perimeter of two and a half miles, and is situated two miles outside cantonments. At one time in August there were six and a half battalions engaged on these duties, and only three battalions and a weak cavalry brigade mobile.

It was the old story of the effect of a fortified Headquarters on strategy, combined with the effect of civil influence when troops are acting in aid of Civil Power. It was essential that the Afridis should be kept out of Cantonments and out of the Aerodrome, against which they had special enmity. It is not for a junior commander to say what should have been done. He cannot know what exactly is in the mind of his Chief, what the exact situation is, what are the orders from above and government policy, and in this case what the civil situation was, and what exactly was the state in Peshawar City. As it was, there was at the time a great deal too much irresponsible criticism flying about, by people who had no idea of the conditions or of the situation. Comment has already been made on the effect the bad state of the Peshawar District, and Peshawar City in particular, had on operations. If there had been three mobile columns operating, one cavalry and two infantry (combined with artillery, etc.), there would have been more chance of rounding up the Afridis, especially if the troops had been co-operating from bivouacs outside Peshawar and had not been tied to the place in any way. Each Infantry Column should have consisted of at least two if not three battalions, together with a proportion of Mountain Artillery, and here it should be noted that Afridi tactics necessitate all-round protection of guns, transport, ambulances, etc., and a Reserve too is required, as is the case in Bush or Arab warfare; in fact troops at rest require a perimeter camp. As it was, there was only one column available, and this largely contributed to the Afridis escaping comparatively lightly. The garrison in Peshawar, being short of transport, could do little in the way of co-operation except in the close vicinity of the station.

Scouts from Waziristan were brought down to Peshawar in August, as they had been brought down in June, to help in rounding up Red Shirts and for operations against the Utman Khel. On each occasion they did admirable work. Their knowledge of Pushtu and of Pathan customs rendered them invaluable. In searching Pathan villages, British troops and Sikhs, Dogras and Gurkhas are greatly handicapped by their ignorance of the language, and their inability to tell

friend from foe when both are so similar. The Frontier Constabulary, who are all Pathans, were equally useful, and on many occasions they co-operated with the Regulars and rendered splendid service. It has for years and years been the custom on the Frontier for Regulars and Irregulars to work together, the alliance has been a happy one and both have learnt much from each other.

In August the Scouts, some six hundred in number, were no more successful at finding the Afridis and bringing them to book than were the Regulars. The Scouts were, in the first case, lucky that they had a call on twenty to thirty hired lorries always at hand during the period under review, while the Regular infantry usually had to march. These invaluable lorries enabled the Scouts to get rapidly about the country, and were a good example of the use of mechanical transport as an aid to mobility. The hiring of these lorries of course meant money, but it was money well spent. The Frontier Constabulary also always had their own lorries and moved in them. While profiting by these experiences, the newly organised Regular mobile columns are mechanised as far as Government mechanical transport is available.

The Scouts are a very fine body of men, officered by a number of keen, active young officers. They are raised and maintained almost entirely for trans-border police duties in the areas where they are stationed. This rôle they carry out mainly by means of platoon "gashts" (platoon patrols), which move about freely over the hills of their particular areas, staying out for a night or two. They can thus specialise in their particular form of employment, and are equipped accordingly. The Regulars can learn a great deal from them as regards mobility, from their sensible equipment, and how to move rapidly and effectively over the Frontier hills.

One cannot, however, compare them logically with the Regulars, who are organised and equipped to carry out any duty which the Empire may require of them, in any part of the world, and to fight in great battles as well as frontier skirmishes. There is no need here to give a list of the many actions performed by the Army during the last hundred years, especially as the writer is confident that such feats will be repeated for the next hundred years if need be. He notes with concern, however, that there is nowadays a tendency to draw disparaging comparisons between such good comrades as Regulars and Irregulars, both indispensable in their own spheres, and whose

duties are so closely inter-locked. Together they stand, separated they fall; to attempt to put one against the other is to do injustice to both. The wise man takes a broad view and accords honour where honour is due. The thinking soldier, if he is to be of any value to his profession, must avoid parochialism. The "khaki" of the frontier is undoubtedly fascinating, but it is not the only topic of thought for the British officer.

It was a remarkable fact how fit the troops, particularly the British troops, Field Artillery and Infantry, kept during these operations when out all day in the sun. Directly they went out from their temporary barracks on columns, the sick rate went down to an astonishingly low figure.

In the Nowshera Column there were only twelve cases of heat exhaustion, and none of these serious, during the whole hot weather operations. It was noticeable that those British units which contained a large quota of young soldiers did not stand the heat as well as those of a more mature age; despite this, results were encouraging and showed that with sensible discipline the dangers from heat can be rendered negligible. Heat casualties are as difficult to evacuate and as crippling as battle casualties. People may say "But why worry about the heat? They carried on in the old days in the Mutiny right through the heat of the hot weather." But in those days the men were much older, they were the survivals of the fittest, men of fifteen to twenty years service. Now the men on an average, British and Indians, have about five years service, and they must be given all the help possible; granted this, they will prove as tough as their forbears.

Regimental and Staff arrangements must be good. For instance, if the men's food and water are carefully arranged for, if they are not overloaded, if they are not kept standing about in the heat, if the times of march and of entraining or embussing are carefully thought out, the troops can stand a great deal of hot weather campaigning, as they did in the dry heat of Mesopotamia in the war. On the Staff work depends their mobility.

Mobility is a relative expression. After a certain point it can only be ensured by sacrificing something which in itself is important. The regular soldier normally carries a heavy load and by reducing this in a hot weather campaign, he will be made more mobile. Certain articles of equipment can well be curtailed in accordance with the enemy

to be encountered. When considering reduction however, it must always be remembered that our scales of equipment have been decided on after countless years of experience in many campaigns, and any reduction of the load on the man cannot but deprive him of some article considered necessary to develop his full fighting efficiency. Similarly if transport, supplies and medical arrangements are unduly cut down to increase mobility, the troops may suffer or there may be failure.

With regard to transport, mobile columns on the North-West Frontier must possess the type of transport which will enable them to move off the road away from their mechanical transport. On the other hand, unless undue extravagance is indulged in, this transport must be reduced to the lowest safe scale. The animal transport of India acts as an undoubted drag to the mobility of a column. Of late years the number of animals accompanying a column has increased greatly. They render our columns most unwieldy and difficult to protect. Also remember that animal transport necessitates the use of many fighting men for its protection, and in difficult intersected country each animal needs a man to lead it. In more open country they can be driven in droves, which is an economical method, but not safe if there is any likelihood of enemy action and consequent stampede and panic. Every superfluous animal then should be eliminated.

No detail which would assist towards the greater mobility of our troops should be neglected. In England, the effect which the experimental brigades and semi-mechanization of certain battalions has had on the general speeding up of operations, the issue of orders and movements of troops, has been remarkable ; and it is for consideration whether some such experiments will not be advantageous in India—the North-West Frontier in particular.

IV. An historical lesson in Mobility. (*See Sketch Map*).

Some of the points noted above, are well brought out in Tonnochy's raid on Makin in Waziristan in November 1901, which is one of the best examples of mobility in comparatively modern times on the North-West Frontier of India. At that time the Mahsuds, who had a big bill of misdeeds up against them, had been blockaded for a year. This blockade had failed in results and it was decided to send into their country light punitive columns on raids of a few days duration. Such columns were sent in simultaneously from Wana,

arwekai, and Jandola in South Waziristan, and from Datta Khel in Tochi in North Waziristan. The last named is that now referred to. It was commanded by Colonel V. C. Tonnochy, C.B., Commandant, 3rd Sikhs, Punjab Frontier Force.

The troops comprising the Column were :—

2 guns Derajat Mountain Battery (7-pdrs.)
1 Section Bengal Sappers & Miners, under Major Sheppard.*
500 men 3rd Sikhs, P.F.F. including 30 Mounted Infantry on mules (now 3/12th F.F. Regiment).
500 men 2nd Punjab Infantry, P.F.F. (now 2/13th F.F. Rifles).
2 Hospital assistants and 82 *Kahars* (*dhooly* bearers).
4 followers per battalion.

There was no transport of any kind and no officers' chargers.

One battery mule carried 18 officers' kits and greatcoats.

One battery mule carried officers' mess.

Otherwise, except for the Artillery, Sappers and Miners and Mounted Infantry, there were no animals.

No reserve ammunition was carried. There was no Field Ambulance. No *dhoolies* were taken, only stretchers by the *Kahars*.

The men were very heavily loaded. They carried one hundred rounds Martini-Henry S.A.A. (a big weight), two days' cooked food, and a great coat or *poshteen*. They wore the " coat, warm, British " with braces over it. The weather was very cold in the hills. One pound of *atta* per man for 1,200 men was carried in 30-lb. bags by the *Kahars*.

There was a full moon. The Column marched from Datta Khel at 9 p.m. on the 23rd November. At 3 a.m. on the 24th November the Column reached Spina Punga Narai (9,000 feet) where it halted until dawn. The moon set at 4 a.m. and the cold was intense. At 6-30 a.m. the Column started again and at 10-30 a.m. reached Shurdar Narai (9-400 feet); much time had been wasted by the guide losing his way. Far below was the head of the Shuran Algad (Spinkamar). The Mahsuds were absolutely surprised. The Column dropped down a steep track into the head of the valley and seized the highest village unopposed. Here it bivouacked.

* Now Major-General S. H. Sheppard, C.B., C.M.G., D.S.O.

On the 25th November the Column moved down the Shuran Algad and destroyed twenty villages, blowing up fourteen towers. The Mahsuds made but trifling resistance.

The Report says : " By the evening the Column issued from the Algad (Shuran) four miles from Makin, but it was too late to do more than seek night quarters. At a rapid rate a move was made on the Mahsud village of Bitt Malik Shahi, in the direction of Razmak Plain." (This village is about two miles north of the present Razmak Camp). As the Column crossed the present landing ground, an officer of the 2nd Punjab Infantry was hit in the leg by a bullet from a Mahsud somewhere about the ridge between the present Upper and Lower camps.

On the 26th November the Column halted and the Pathan company 3rd Sikhs was sent over Razmak Narai to the Wazir village of Mamiroga to replenish supplies. This village owed the Political Officer (Captain Down) a fine and the troops came back with three hundred goats. A small reconnaissance with intent to deceive, was sent over the hills into the Shaktu Valley.

On the 27th November, leaving all the sick and tired men in the village, the Column raided Makin (sixteen miles there and back). Having no transport to encumber it, it moved straight across country. The Mahsuds were absolutely surprised and were so busy driving away their cattle and camels, and taking their families into the gorges of Pirgul, that they offered little resistance.

Three towers were blown up (no more explosives were left) and three-fourths of Makin burnt. Demolition work began at noon and the retirement under thick clouds of smoke began at 2 p.m. The enemy followed up to the vicinity of Bitt Malik Shahi village but did little damage, as the Column moved too fast. The Mounted Infantry were most useful in piquetting over that open country, their mobility enabling them to be used several times.

On the 28th November, " the retirement over and down the difficult and wooded Narai was strongly followed up " as the Report says—one dead man had to be left behind, the rear guard was hard pressed.

The Mahsuds stopped their pursuit soon after the Column reached Wazir territory in the Khaisora, but the Wazirs of Mamiroga fired heavily into the rear guard as it passed the village. The Column

then pushed on over the Loargi Narai and reached Datta Khel late in the evening, having marched and fought twenty-two miles since dawn.

Casulties were :—

Killed	..	3
Wounded	..	1 British Officer.
		1 Indian Officer.
		13 Indian Other Ranks.
Total		18

Comments.

The above is a good example of a mobile operation and shows how troops can move when unencumbered with transport. It could be done thirty-two years ago when the tribesmen were armed with only Jezails and a few Martinis and Sniders. To carry out such an operation now against modern tribal armament, some reserve ammunition and much more complete medical arrangements would be required. Even with eighteen casualties in this operation on the last day of the march back, every stretcher and every riding mule of the Mounted Infantry were utilized for wounded, sick or tired men. The men were very tired. The writer's opinion is that they were bigger men than our present-day sepoy and men of much more service. In fact there were many men there with the Kabul-Kandahar Star of twenty-one years before.

This little " show " is a good example of the value of " surprise." " Surprise " of the Pathan or other uncivilized foe is not difficult to accomplish and, once accomplished, the results are great. During the recent " Khajuri " operations four night operations against cave villages were carried out. In each case the country traversed was difficult but the villages were successfully surrounded in the dark. The Pathan is alleged to be a " night bird," but like every other human being he usually sleeps at night, hence the dark hours give the best chance for surprising him ; it follows then that our troops must be carefully trained for night operations, making use of the advantages initiative and training give them.

It is suggested that operations might be more frequently planned against an uncivilised enemy on the lines employed by Tonnochy, *i.e.*, extreme mobility, much reduced transport, and offensive action, and produce good results. Such action would demand some changes

in our modern ideas on equipment and so forth, but might well be successful in meeting an emergency, and should therefore be prepared for. In dealing with Asiatics, boldness and speed spell success and ensure a minimum of losses.

V.—Deductions and suggestions.

Fortified by the lessons of history and his own experiences, the writer now ventures to draw deductions from what he has already written and to make certain suggestions which he considers may be of use to those seeking for a solution to the mobility problem.

(a) Load on the soldier.

It has already been stated that the load on the man, and to a certain extent the transport accompanying, cannot be reduced beyond a certain amount without reducing fighting power. These matters were most carefully examined during the hot weather operations of 1930 by formation and unit commanders, in order to reduce both for the sake of mobility and for climate. Certain things the infantryman must carry. They are :—

1. The rifle and bayonet or pistol.
2. S. A. A.
3. Filled water bottle.
4. Emergency ration.
5. 1st Field dressing.
6. Haversack ration.
7. Possibly a bomb or two.
8. Web equipment.
9. Haversack.
10. Mess tin.

Non-commissioned officers, specialists and others have to carry in addition, binoculars, maps, note books, helios, flags, etc., etc.

The amount of S.A.A. to be carried in the field is a controversial matter. Troops may go out day after day and need none at all, and suddenly without warning a small party may need a great deal. Before reducing, the situation must be appreciated, and the chances of enemy action estimated, and undoubtedly it is better carry too much than too little ; also it weighs so light that to lighten a man's load appreciably, considerable reductions must be made, and this is risky. In the hot weather of 1930, the Infantry carried eighty

rounds per man ; this may be thought excessive in view of the fact that reserve S.A.A. was carried, but it was noted that the men did not suffer any inconvenience thereby. Finally, it was considered better to reduce the reserve S.A.A. which is frequently not readily available when actually required in difficult hilly or thick country.

Food.—The haversack ration must be carried. A man cannot go through a long day from early morning breakfast at 6 a.m. or earlier, to the evening meal at 6 p.m. (if he is lucky) with nothing to eat.

Equipment.—It was suggested in the extreme heat of 1930 that the Indian Infantry should operate like Irregulars in *pagri*, shirts, shorts and *chaplis* only, nothing else, with fifty rounds of S. A. A. in a cotton bandolier slung over one shoulder and a water bottle over the other. After experiments this suggestion was discarded, as it was realised that the standard web equipment is the best means invented of carrying one's equipment and load—it keeps the chest free and open, and nothing bangs about. Anything slung across the chest is to be deprecated.

Haversack.—The few personal things a man requires for a day or two's operation can be put in the haversack which is carried on the back, pack-wise. In the hot weather, for a day or two, most of the articles laid down in Field Service Regulations should be left behind, *viz.*, change of underclothes, trousers, waterproof sheet, etc. A towel, soap, pair of socks and, possibly, housewife are all that are needed in the haversack. As the weather gets colder more must be carried, *viz.*, a cardigan jacket and a waterproof sheet. In addition, a blanket or two and the greatcoat must be carried on transport ; in fact for winter campaigning a scale of baggage becomes necessary.

It is not possible for troops to fight over hilly country, or indeed anywhere in the hot weather, carrying a pack. It is hoped that in the near future, allowance will be made in Field Service Manuals for the pack to be carried in the transport, as it is at Home. On the Khajuri Plain 1930/31, troops marched on a permanent move from one camp to another carrying a pack, but they never carried it on a day's operations.

The *Mess Tin* is a convenient way of carrying the haversack-ration and is easily worn.

Footgear.—In actual movement, the wearing of *chaplis* instead of boots in stony, broken country undoubtedly leads to speed and mobility and the reduction of casualties. Boots of course must always be taken for general service wear. But it is worthy of consideration whether, for service on the North-West Frontier and Afghanistan, every man should not carry a pair of *chaplis* in his kit. They are very light and a relief to put on in bivouac after a long day. They add enormously to mobility over bad, rocky ground. They out-last boots in wear and are easily mended. Certain units of the Khajuri Force wore *chaplis*. The stony country wore out three pairs of boots in five months or two pairs of *chaplis*, resulting in a saving to Government of Rs. 27/- per man :—

(*b*). *Transport.*

To increase the mobility of Columns in the very intersected Peshawar country during the hot weather operations of 1930, the transport to accompany battalions was modified to suit circumstances, as under. Three scales were worked out.

(*i*) Cart.

(*ii*) All pack.

(*a*) for 12 hours.

(*b*) for 2 nights.

The country rendered " all pack " far the more suitable.

All pack.—(In proportion to normal)—

(*a*). Vickers guns, Lewis guns and rifle reserve S. A. A. reduced to less than one-third.

(*b*). Tools, (12 hours) nil, (2 nights), full.

(*c*). Signalling, full.

(*d*). Medical and stretchers, full.

(*e*). Water, increased by 10 mule loads.

(*f*). Cooking pots, (12 hours) nil, (2 nights), half.

(*g*). Officers' Mess, three-fifths.

(*h*). Supplies, (2 nights), reduced to about half by carriage of no firewood or fodder (to be obtained locally) and by calculation on actual numbers.

Total mules per battalion, all pack, normal 143. As ordered above ; for 12 hours, 50 ; for 2 nights, 77 ; (of which 21 in each case were water).

(*c*) *Training with special reference to issue of orders.*

There are certain matters of training which it is considered adversely affect Mobility. "Mouse" complains in his article of the complexity of modern tactics, as evolved from the teachings of the Great War, especially in the Attack ; and draws attention to the number of preparations necessary before an attack can be launched. This is the teaching of the Senior Officers' School, but then the Senior Officers' School concerns itself mainly with scientific modern war with all its paraphernalia and armament. An officer is expected to be able to modify this, and to use his judgment when opposed to an uncivilized foe inferiorly armed ; and in the writer's opinion the average officer can do so. There are exceptions of course, and one meets from time to time the unintelligent officer who will make the excuse of his Senior Officers' School teaching when criticised for his slowness in launching an attack in the field. It is very important that no attack shall be launched without proper reconnaissance, but, because it is laid down at a Staff Ride at Home that three and a half hours are required to launch an Advanced Guard Brigade in the attack which is to be carried out mainly by fire, it does not follow that that time must elapse before a brigade can attack on the North-West Frontier. The enemy will have either disappeared or will have trebled his numbers, since all the onlookers sitting on the fence will construe the delay to be caused by fear, and, thus encouraged, will have joined in.

On the other hand, a brigade or a battalion cannot be launched to the attack on the command "*Chelo Bhai.*" Indescribable confusion would result and all co-operation would be lost. Full advantage must be taken of the many weapons—artillery, machine guns, aircraft, which we have and which the uncivilized enemy does not possess ; there must be a detailed plan combining the action of all arms. No company or platoon of infantry can attack without reconnaissance ; they must know where they are going, and what ground they will have to cross. Artillery and machine guns must do likewise. It has been found by the writer, after many trials, that after the Brigadier had made his reconnaissance and his plan,

(provided no complicated fire plan was necessary), the forward infantry could move off to attack in one hour's time. The Brigadier, with his plan in his head, can dictate his orders on the ground in fifteen or twenty minutes, officers can ride to their units, the Battalion Commanders, Company and Platoon Commanders, and Section Commanders, can make their reconnaissance and give out their orders, the Battery and Machine Gun Commanders can do likewise, and gain touch with the Infantry they are supporting; the Infantry can move to their positions and can deploy, and the Signals prepare their communications, in forty-five minutes. But this is quick work and can only be done after much practice—in no circumstances can it be done much quicker for a properly co-ordinated attack.

A " Drive " or a " Reconnaissance in Force " can be started more quickly. Orders can then be issued before troops leave their camp or quarters. But it will take half an hour then for troops to form up at the rendezvous and to get their bearings.

The teaching of the School invaluable. It brings to notice countless points which are often forgotten. But these must be employed with discrimination and must be speeded up to the utmost.

By all means encourage individuality and initiative and freedom of action in young leaders, but they must remember that they are part of a greater whole. Loyalty and Co-operation is the keynote, not Independence. It does not assist the issue in hand if the advanced troops go tearing ahead and chasing some shadow in the form of a few fleeing enemy, and never give a thought to or send word back to the Commander behind. All co-peration is thereby lost, the artillery cannot come into action even. This has happened before now. It is Babu Tactics with a vengeance.

(*d*) *Deliberation in the Advance.*

Another phenomenon which leads to delay in the field is the cautious advance, the advance by " bounds." " Bounds " are very good in a promotion examination or a Staff Ride. They gain many marks. They are sound for Cavalry or Armoured Fighting Vehicles which can bound at a rapid pace. They are sound against a civilized enemy who may deliver a smashing counter-stroke. But for Infantry

against an uncivilized foe, this concertina, caterpillar mode of advance doubles the time taken. By all means "complete a certain phase" or "make good a certain line," but do not close up your whole force or even battalion. The tribesmen normally will not stand up to an advance on a broad front; he fears being outflanked. If by chance he does stand so much the better. Against Asiatics risks must be taken, and the chance of suffering casualties faced—"safety first" will never succeed. Remember Lord Roberts' decision to fight the battle of Charasia and the results achieved.

There is too much thought of the loss of a rifle or of a few men on the North-West Frontier. Covering fire, fire and movement inside a small unit, are necessary in the last isolated advance of a piquet or similar occasion, but in the general advance or retirement in a brigade or battalion operation troops must trust the troops behind them, the artillery or the many machine guns, and neighbouring troops, to cover and support them. If a brigade or unit is trained as it should be, this support will be automatic. If every sub-unit is to think of nothing but itself, to cover itself and act as if it is a hermetically sealed compartment, the advance of an attacking force must be slow, and Mobility will be lacking.

(*e*) *The need for well organized rapidity of action.*

In a brigade or divisional operation time is everything. Everything must be done to ensure speed; not a moment must be wasted. Every officer should continually bear this in mind. The writer contends that officers, as a rule, both in office and in the field, are apt to act too deliberately. Darkness, that friend of the defeated, comes on all too fast; the day is never sufficiently long. It is an urgent necessity that the Signal procedure should be cut down to the absolute minimum necessary. There are too many precautions against possible mistakes. Something similar to the naval procedure and the artillery code, when infantry report targets, is greatly needed.

But the main aid to Mobility and speed of operations is a well-trained brigade and units who know and trust each other and will work without orders in co-operation and mutual *liaison* towards the common end. It should be the object of all that orders in the field should be as few as possible.

Infantry formations and units should adopt cavalry methods to a greater extent. The presence at Brigade Headquarters of Commanding Officers during the approach march, and of the Commanding Officer of the Reserve Battalion during all stages of an action, is an invaluable aid towards rapidity of action. Their presence means personal touch, the secret of Mobility and rapidity of action.

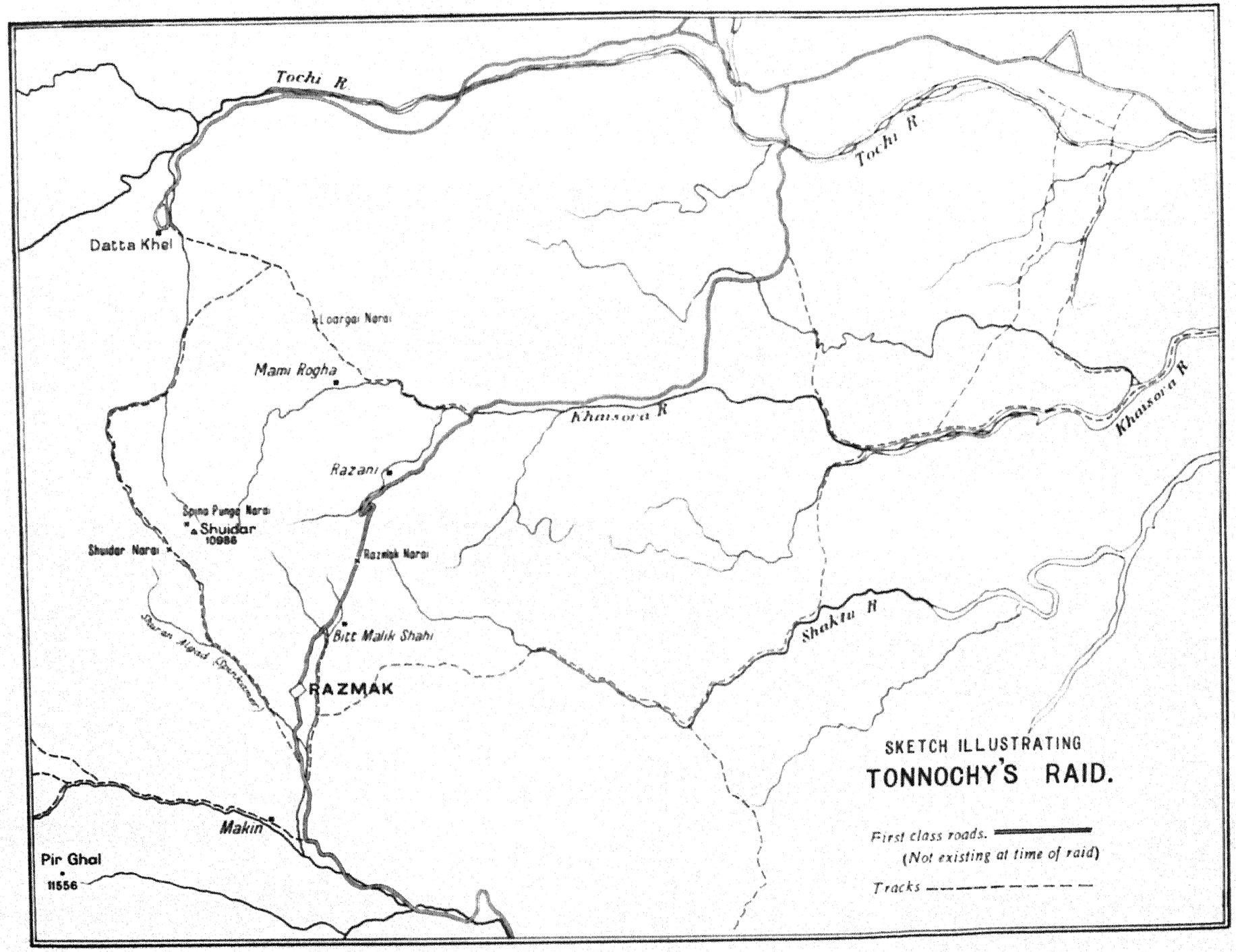
VI.—Conclusion.

What the writer saw of the troops of the Khajuri Force last winter gave him the impression that they were thoroughly mobile, active and energetic.

They frequently engaged the Afridis ; they marched long distances, and when not marching made miles of road, so that mobility might be increased by opening up the country for mechanical transport.

The writer does not agree that they were over-armed and consequently could not move. The Afridis would not agree to this. A modern infantry brigade now possesses much fire power and can deliver an overwhelming blow ; experience suggests that this increase in fire power has not interfered with their pace of movement in rough or broken country. The machine guns and Lewis guns never retarded the riflemen in their movements. Although possibly a machine gun on mules cannot cover so much ground as one in a Carden-Loyd carrier, it can move in places where the latter can not, and usually it can conform to the movements of the riflemen. It is thought that the average Commanding Officer on the Khajuri would not willingly give up a single one of his Lewis guns. It was proved several times that the Afridis respect an automatic ; while they do not fear rifle fire in the same degree.

Troops changed camp frequently and became adept in settling down and making sufficient protection at the end of a long march. The construction of too solid camp defences with huge 5·9″ proof traverses and parados in a perimeter camp, which it is not intended to occupy permanently, is not to be encouraged, as massive fortifications tend to suggest sedentary warfare. One must take precautions, but must be prepared for a few casualties.



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Troops became very skilled in taking down and putting up a double apron wire fence round camp. They could dismantle such a fence in forty-five minutes the day before the move, take the wire by lorry to the new camp and re-erect it there in the same time. A wire fence is not really necessary round a perimeter camp which is only to be occupied temporarily—the Inlying Piquets sleeping on the perimeter (some 25% of the strength of the force), are sufficient protection ; but in a permanent camp wire saves sentries. In Permanent Piquets wire is always necessary to economise garrisons.

Even the fire-places in offices and messes were mobile ; on move of camp these were pulled down, the 400 bricks taken by lorry and the fire-place rebuilt and a fire burning on the second day in the new camp.

Some of the troops made 65 miles of road and marched 845 miles over the Khajuri and Aka Khel Plains. They learnt to manœuvre and operate on a broad front in very good co-operation of all arms, at a rapid pace with very few orders. They attained great physical fitness and habitually moved on marches of often twenty miles or more across very broken and stony country, at a pace of three to three and a half miles per hour including the ten-minutes hourly halt.

Although we failed to catch the Afridis and to annihilate them during the summer of 1930, the writer contends that they had the conceit taken out of them during the ensuing winter. They suffered great material damage and lost all their trade, and they have done nothing since but bicker amongst themselves. They boasted that Tirah was their father, Khajuri Plain their mother, Karawal Hill their son, and Besai Ridge their daughter, and that they would never give up any of them. They have had to give up three out of the four without any option in the matter.

A LITTLE GAS.

By "Mouse."

I know nothing about gas *qua* gas. I don't know how it is made, used, smelled or avoided. (Let me hurriedly add, for the sake of my next confidential report, that I have read the pamphlet, "Defence against Gas," but the mere reading of books doesn't make one a meter inspector). On the other hand, like all other good generals, I am not in the habit of decrying any new gadget in warfare until I have had a look at it, and in the particular case of gas I have kept a mind so open that it is almost vacuous. One's young mind is soft; it ought to be soft and ready to receive or reject impressions. On that amorphous mass the experiences of years should crash, punch and bounce so that in the end it becomes a more solid, splendid thing, fashioned from subaltern clay into a resilient mould destined to fit either a Field-Marshal's hat or a Lincoln and Bennett like mine.

Now, since the war the question of gas has been mishandled most alarmingly. For this state of affairs we must blame the unctuous snobpiddlery of England. Just because the Germans were clever enough to add gas to their armoury, thereby taking France and England by surprise—war's gravest error—France and England appealed immediately to Humanity (*i.e.*, British non-conformists and the U.S.A.) to cover their own egregious lack of foresight by denouncing their enemy's brutality. Personally, I would just as soon have a whiff of gas in the lungs as an Afridi bullet in the guts, but that is because I am not a romantic. War is not a gentlemanly recreation; nor are civil commotions, manœuvres, or inspections. The chivalry and the glamorous history of past ages are employed to hide the dirty work involved in these military affairs with such effect that the civilian population of the world even yet hug to themselves the delusion that war is governed by rules, regulations and codes of precedence. This is why statesmen, whose sense of proportion had been distorted into idiotic phantasmagoriae by their own propaganda, decided after the war that the use of gas was reprehensible, and should therefore be prevented by high-sounding conventions and regulations. Gas is now Taboo. But if a big war breaks out to-morrow every aspirin and cascara factory in the world will be converted to produce high pressure

cylinders of the most death-dealing gases which chemists can imagine, and the civilian population will have no further need of relief from the miseries of headaches or constipation. You can't argue with death.

This sounds very bloodthirsty, but we soldiers in the British Empire are of course pinning our fate on the Disarmament Conference plus the League of Nations to prevent any more international struggles —except, perhaps, scuffles between Russia, Japan and China, with the U. S. A. as referee, and England and France as judges— and consequently the immediate possibility of Merger Gas Trusts is remote. In the meantime we have to serve India, or bits of it, and in this sphere I am desperately interested. Heaven forbid that I should exhume the corpse of the Simon Report to divulge that in India there are a certain number of peoples who don't see tooth to tooth, but most soldiers have rather bitter and unpleasant experiences of helping the civil power to control the "dumb, depressed millions" when they become vocal and exhilarated. If I may be forgiven I would like to quote a couple of trivial personal examples of non-violent operations in which I played a walking-on part. In each case I would have liked to have used gas.

The first example occurred in the south of India two days after certain under-dressed gentleman had his political reputation saved by being entertained in one of His Majesty's rest-houses. A police-station was stormed causing more excitement than damage. A platoon of British Infantry was requisitioned to move down a broad street thronged with several thousand excited Indians, of whom perhaps seven *per cent.* had any political views. A very gallant I. C. S. officer headed the procession in a dilapidated two-seater which was mauled slightly. Events took a more serious turn when a local butcher sought the abode of hour is by attacking the platoon commander with a carving knife. He was eliminated by the "in-out-on-guard" motion of our bayonet fighting manuals and wiped off by a tidy-minded N. C. O. into the gutter. Then the fun started. Three persons, so far as I remember, were killed, one of whom deserved death, the others being perfectly innocent spectators who had the temerity to watch the excitement from their adjacent houses. Once you loose off a bullet you can't control it and ricochets have an incredible ability to do exactly what the firer did not intend. A couple of gas bombs would have cleared that street.

The next example is more personal. Owing to death, sickness and absence on leave of all suitable officers, the duty of commanding troops in aid of the civil power once devolved on me. Naturally enough, the civil powers were rather indignant, but the Area Commander, deciding according to the excellent tradition of the service that Age and not Efficiency is the criterion, pushed me down with a hundred rifles and two well-armoured cars to preserve peace and harmony during a religious festival. The occasion would have been normal, merely the annual veneration of a Sikh Guru's tomb, if it had not been aggravated by the fact that it occurred in the close vicinity of the largest Mosque in the Province on a Friday. Three weeks previously the city had witnessed the greatest Sikh-Muslim riot in living memory, and the situation would have been described by our Intelligence experts as "giving serious cause for anxiety among the local authorities." Only those who have partaken of communal riots in India can realise their hopeless and incredible brutality. One can't write about it. (If I were Dictator of India, I would collect the three hundred leaders of the various religions, lock them all up in a room without food or water, and make them evolve a common religion, which I would christen Common Decency. I would then order them to enforce it. After that I would go down to posterity as the only far-seeing statesman who realised India's need and quietly cut my throat.)

To get back to me as Officer Commanding Troops. Picture a lone infantry officer, of a service within all the axeable ranges peering over the enormously high wall of a great fort. Down below to the right was the Guru's tomb with the close area swarming with enthusiastic Sikhs. A happy crowd, and apparently all out to have a good excuse for making a jolly day of it. A police officer told me that there were five thousand Sikhs and I thanked him for the grim information. Just beyond this medley was the plinth of the Mosque, large enough to hold a Brigade parade, where the excellent police had tactfully interposed a fence of tent walls between the two worshipping peoples. For that I was grateful.

Some time between three and four of this hot afternoon in June six thousand Mohammadans issued from their devotions and crowded the enormous plinth. Although I, Officer Commanding Troops and all, was watching them from the wall of the fort, they advanced in billowing array to the edge, raised their *lathis* and called out, "Allah ho Akbar!" One does not often hear six thousand worshippers giving tongue like

that, and I confess that the roar gave me no spiritual exaltation. My diaphragm slumped like it does when my immediate G. S. O. 2 catches me kissing his typist during office hours. The response from the Sikh crowd was immediate. A shudder ran through them. Then they divided, the women and children taking the safe direction, and the men gathering to face the Mohammadan hosts. Shrill cries of "Sat Sri Akal!" rent the dancing air. Police whistles sounded. A body of armed police ran in a compact mass from the Fort Gate to reinforce the thin line of constables guarding the tent-walls. The Mohammadans gave another throaty roar and a forest of staves was brandished. The Sikhs surged forward. I wished devotedly that I could have a talk with my mother, so I rang up the Brigade Major. In rapid sentences I told him the situation. "Splendid!" he said "We rely on you, old boy." I would have preferred my mother.

About two hundred yards to the right front the frail tent wall collapsed and a scuffle ensued. The District Magistrate, who was holding my sweaty hand, collected his last police reserves and dashed out towards the centre of the religious dispute. Before going he mentioned that if things did not improve I was to take any action necessary, and he politely signed my previously prepared order to fire. He and his little band were then swallowed up in the crowd.

More skirmishes became apparent all along the front line. The time had come for me to do my stuff. Not knowing what on earth to do, I sent out the two armoured cars with orders to cruise up through the Sikh crowd, turn at the entrance to the plinth and move down between the two factions. On no account was fire to be opened by the Armoured Cars, as I would cover the movement from the fort wall. The cars, electrified, moved out with the snouts of their machine guns quivering as if they smelt blood; a thanksgiving spectacle which would have done the Adjutant-General and all others in authority good.

An hour later the Mohammadans had dispersed, the Sikhs were continuing their fun, and I, with a pipe and drum band, was route-marching round the area, looking as if I was doing it for exercise. Now, this is no dramatic story, and has no military lessons. I asked various military officers of senior rank what they would have done in the circumstances and they all assured me they would have done exactly the same. Liars. When I asked them what I ought to have done

if a riot had occurred, I could elicit no satisfactory reply. If a large scale riot had developed my problem was twofold :—

(*a*) Should I have marched my hundred rifles through a mass of eleven thousand men and run the obvious risk of being over-whelmed by sheer weight of numbers ? I could have shot or bayoneted a passage, of course, but *cui bono* ?

(*b*) Should I have lined the parapet in perfect safety, warned the crowd with bugles, and opened controlled fire on the various centres of rioting. This sounds admirable and was disconcertingly feasible, but I would most certainly have killed several policemen and probably the District Magistrate. Then you can imagine what the Court of Inquiry would have said, the lambs. The brave soldiers firing into a crowd from a position of perfect safety, killing Government servants and *not* stopping the riot—Brutality, Sacrilege, Indifference, Incompetence !

Anyhow, I was lucky, but if I had had gas projectors ! In that particular situation gas would have created a panic, but firing from the Fort wall would have also caused a stampede plus a certain amount of carnage.

The politicians are terrified of gas. Propaganda has given it such an ugly reputation that it is now classed with the more bestial things in warfare, such as eating bully-beef and raping nunneries. The bullet and bayonet have acquired the dignity of long usage, and although their use in civil commotion is deplorable, it is considered far safer to employ these weapons which we all know and respect than to risk the hullabaloo which a few gas bombs would certainly raise.

The main objections to gas are :—

(*a*) Its novelty.

(*b*) The unknown consequences which m'ght follow its employment in a crowd—Panic, stampede, death of people by trampling and so on.

Presumably these inadequate reasons are sufficient to prevent even experimentation. This attitude is so conservative that it reminds me of an old Irish woman who refused a lift in my motor car because :—

(*a*) she had never been in a car before, and

(*b*) the bumping of the car might break the eggs in her basket.

So she walked.

I have called these reasons inadequate because I think they are the reflection of public opinion which is generally both ignorant and stupid when it is consistently uninformed by the leaders and the press. The use of gas for civil disturbances is not novel. It has been used effectively in Africa, China, Germany and America during the last ten years. In America the latest home of civilisation in its westward trend, tear-gas is now a commercial product, and is used extensively for the protection of banks and bullion go-downs. In Chicago that model of civic virtue which is aped so indifferently by some of the intelligentsia in Bengal, the police are equipped with tear-gas outfits and in encounters with mobs have invariably upheld the honour of law and order without having to resort to methods which leave bitterness behind. The communal riots which occur in America are frequent and take the form of bloodthirsty mobs attempting to lynch negroes in police custody. The tackling of these temporarily maddened crowds is difficult, not merely because the sympathy of the state forces may well lie with the "enemy" but because any deaths caused by force in a democratic country leave a terrible memory which nothing effaces.

In a few years time India will have exactly the same problem. Complete Indianisation of large parts of the armed Indian forces of the Crown and the possible reduction of the British garrison will impose a tremendous responsibility and an unnatural strain on the security services. Are you going to get a Mohammadan armed body to fire on a Mohammadan mob looting a Hindu temple? Sez I. Are you going to get a Hindu body to break up a recalcitrant Hindu crowd who may be planning the immediate exploitation of their Mohammadan fellow-citizens? These are not rhetorical questions; they come through one's mind frequently but are rarely uttered. Human nature being what it is in India I find it difficult to believe that our perfectly fair, impartial, but strong, methods of dealing with obstreperous mobs will be successful under Swaraj. The keystone of British rule in India has been its unimpugnable impartiality to all religions.

When the keystone is removed the arch may cave in. But Indian administrators will in their wisdom shove it up for a while by searching around for different means of crowd dispersion. It has been comparatively easy for us, so-called aliens, because even in those unfortunate occasions when the innocent have had to suffer with the guilty the population have readily conceded the truth that accidents will

happen in even the best regulated riots. The same population will, however, judge their own blood rulers more harshly and will rarely give them the benefit of the doubt. We have taught India a thing or two in our time, but now towards the end we seem to funk showing her the benefits of the most humane weapon, tear-gas. When communal disturbances occur, and in my present mood of justifiable pessimism I foresee riots and bloodshed which will make Cawnpore look like a pleasant little fracas, the civil authorities and internal security services, no matter how idealistic and impartial, will have to use rifles on their own co-religionists, and Heaven knows where it will all end.

If I were the first new ruler in India, I would call to me my Chief of Police. To him would I say "*Dekho, jawan.* I want every provincial police force to have tear-gas squads in every town of over a lakh of inhabitants. They will be equipped with sprayers, bombs, candles, fast lorries and masks. They will be used in all civil disturbances, backed by armed police and the army. The army will be used, as in the times of the British, as the last resort. Their duty will be to kill when these other methods fail. But gas, *insha-Allah*, will never fail. *Bundobust karo.*" This action would receive the applause of even the extremist press, and probably ensure my tenure of the *gaddi* for its full span of five years, and I would then go down to history as the King of Gas.

In conclusion, it ought to be stated that the object of writing this grave document is not so much to demonstrate my obvious qualifications for very high office in the new Federation, as to point out that the use of tear-gas in India would help to solve the greatest civil and military problem which will confront the authorities, civil war.

THE PUNCHAYET RULE OF THE KHALSA ARMY, 1841—45.

By C. Grey.

Owing to the official documents, which contain essential details of these extraordinary organisations, having only recently been made available, the full account of them has not yet been written, a deficiency I propose to remedy, for they should be of great interest to every soldier of any nation, whether as student or casual reader. Besides the official account, I have drawn upon a contemporary book, the material for which was furnished by the European adventurer, Gardiner, who served with the Khalsa Army for many years.

Though the Khalsa army, or anyone connected with it, could have known nothing of the Decline and Fall of the Roman Empire, their proceedings during the decline and fall of the Sikh Domination bear a most extraordinary resemblance to those of the Praetorian Guard of that period in Roman history. Like that body of soldiers, the Khalsa decided the policy, set up and dethroned rulers and ministers, waged a civil war in the interests of the different factions for mercenary considerations, and so increased their own numbers and demands as to become a Frankenstein monster whom its terrified rulers cajoled to destruction against the might of the English.

The value and influence of the punchayets in the affairs of the army and of the nation, was variously estimated by the officers and British officials concerned with the affairs of the Punjab. Some who had forgotten, or never known of the stiff resistance put up by the disciplined troops of the Mahrattas against the British, despised all native ruled armies, and especially one governed by private soldiers which they prophesied would soon cease to exist through internal dissensions amongst unaccustomed rulers, or otherwise would be an unruly mob which a few volleys would disperse. Others, more thoughtful, realised that they were holding the Khalsa army together and by maintaining its training and cohesion, perpetuating an army, which, as early as 1838, Havelock and others spoke of highly.

It was very necessary that the British should keep a vigilant eye on the Punjab and its condition at this period, for they were then engaged in that war with the Afghans which ended so disastrously in the first phase, and for which they had obtained the use of Peshawar as an advanced store depôt and general base. As this was separated

from British possessions by the whole width of the Punjab, it was most vital for the safety of the large numbers of troops passing up and down, and especially for the enormous and valuable convoys, that the Punjab should be peaceful, and the Khalsa troops under control. The magnitude of the latter problem may be estimated from the fact that one convoy alone, which passed the Ravi at Lahore in January 1841, consisted of eleven elephants, two hundred and eighty-seven bullock carts, six hundred pack bullocks and nearly three thousand camels, loaded with ammunition, stores, treasure and supplies, all most tempting to a disorderly soldiery, especially when it was guarded by only four hundred English, and six hundred Indian soldiers.

Those who should have known best from close contact with the Punjab, were contemptuous of the potential danger to the British possessions, believing that the Army of the Khalsa, never formidable (in their opinon), would soon disintegrate, or, if not, could easily be dispersed at any time by a few British guns and a brigade of infantry. Of these was Mr. Clerk, Agent at Ludhiana, who from the very commencement of the anarchy in the Punjab, had pressed the government of India to intervene with armed force pledging himself that the suppression of the army and the restoration of order was merely a matter of a few field days between Lahore and Amritsar. He had actually ordered the Officer Commanding Sirhind and Ambala to advance troops to the Frontier, and called out the levies of the Protected States with that object, and was exceedingly angry when the Government, already regretting their interference in Afghanistan, sternly told him to drop the idea and cancel his orders. What might have happened, a few months later, had he roused the hornets, nest of the Punjab when the disasters in Afghanistan rendered it necessary to send up more troops, is easy enough to understand. Those who had rashly rushed into the restoration of Shah Shuja to an unwilling nation, had now gained ense, or prescience.

Of those who had a truer perspective was Henry Lawrence, then Assistant Political Officer at Peshawar, who, in 1846, wrote in the Calcutta Gazette what he had practically told the Agent six years before. He remarked :

"For long before this war, it was the custom to under-rate the valour and deride the discipline of the Khalsa Army. But, anarchy may have its strength. Its wild and convulsive throes may annihilate

all within reach and, by mad assaults, overthrow kingdoms and abolish dynasties. But, it was left for the Centurion and the Soldier of the Khalsa to prove that both alike are possible, while not only preserving their organisation and discipline, but even training themselves for a strong and vigorous offensive, even whilst apparently only intent on murdering tribunes and pro-consuls, and plundering the treasuries of the nation."

Before proceeding with the narrative it is necessary, in order to understand the allusions to the different units, etc., that a brief account of the Army of the Khalsa at the time of the death of its founder, Ranjit Singh, should be given and some explanation of the causes which led the Sikh soldiers, afterwards the most law-abiding and amenable to discipline in the service of the British, to become what they did, and why they resolved themselves into petty republics, governing the nation by their delegates.

At this time there were about thirty-six thousand regular troops infantry, artillery and cavalry, all uniformed, trained and organised by European officers on the French and English systems ; the former prevailing in the infantry and cavalry, and the latter in the artillery, which was trained and, in a measure, officered by British and Indian deserters from the Company's artillery. The infantry battalions were assembled in brigades of two, three or four battalions, a few, used for tax collecting and small expeditions, being left unbrigaded. Amongst these latter was a battalion of Ghoorkhas, the most trustworthy of all, who were usually employed (at the height of the anarchy) in defending the reigning personages and the treasury within the Fort of Lahore.

Each of these brigades was a self-contained small army having, besides the battalion guns (two to each), a battery of field artillery and a proportion of cavalry, regular or irregular, attached to it. The *elite* of the brigades were those bearing the names of the European Generals Avitabile, Court and Ventura, who had raised and trained them ; that of Ventura being the model and training school. The infantry totalled about 27,000 men in thirty-one battalions. They were not all Sikhs, though that of Ventura contained the largest proportion, but comprised Hindustanis (mostly deserted or disbanded from the Company) Pathans, Ghoorkhas and Punjabi Mussalmans.

The artillery numbered 4,500 men manning about 350 guns of all calibres, of which a number both men and guns, were kept in reserve,

near the Fort of Lahore. There were nineteen field batteries mostly 9-pounders on a British model, but far heavier in metal and therefore adapted for a heavier charge, which enabled them to outrange the English guns in the battles of the Punjab wars. The gunners were mostly Punjabi Mussalmans, and Henry Lawrence spoke highly of this arm, a praise justified by the damage they inflicted on the English armies.

The cavalry consisted of seven nominal regiments divided into Cuirassiers, Dragoons, and ordinary cavalry, none very efficient, for Ranjit Singh had only tolerated them to round off the Europeanised part of his army, and had a force better adapted to his needs in the Ghorcharas, or irregulars.

This force was the natural army of the Punjab and the direct successors of the fighting forces of the Sikh Theocracy before the rise of Ranjit Singh. They were organised on the original system of *Derahs* or camps, each of which was sub-divided into *misls*, or units on a clan, district or village basis, each of which was commanded by either its feudal chief or one elected by the men themselves. There was no uniform system of arms, equipment, or training, their tactics of guerilla warfare, or tumultuous charges, being exactly the same as had prevailed in the Mogul and Mahratta Armies. Yet it was these men who did such damage to the British at Chillianwallah, a battle admirable for their tactics, it being fought in a thick thorn jungle. There were a number of *Derahs*, the principal of which were the Khas, or Royal Ghorcharas, forming the bodyguard, and the Charyaree, or Naulakkha Horse, who only come into our narrative. The latter contained a considerable number of Akalis and Nihungs, both religious fanatics by profession, but always robbers on opportunity. The former were at first recruited from the petty nobility, but latterly were of much the same class as the others. In the beginning, the Ghorcharas were paid by grants of land or remissions of revenue, but, for some years before the death of Ranjit Singh, they had come on the cash pay roll, or what purported to be such. There were 10,000 of them.

Lastly there were the *Jaghirdari* battalions maintained for the service of the state by rajas and nobles who received grants of land (*jaghirs*) for that purpose. There were about twenty-four battalions of varying efficiency, the best being those of the Dogra Rajas, Dhian Singh, Golab Singh and Hira Singh who owned sixteen between them.

Their men were all Dogras armed with a long barrelled musket with which they were very expert. Besides these there were about 12,000 men in the different forts, of which there were 130 scattered over the Punjab, and 1,000 camel sowars, manning 350 *zumbaraks* or swivel guns mounted on camels.

The Regular troops of the Khalsa were paid, or rather supposed to be paid, on the following scale :—

	Rs. to Rs.
General	400 ,, 450
Colonel	300 ,, 350
Commandant	60 ,, 150
Adjutant	30 ,, 60
Major (called Sergt. Major) ..	20 ,, 30
Jemadar	21 ,, 25
Havildar	13 ,, 15
Naik	10 ,, 12
Sergeant (drill)	8 ,, 12
Fourrier (Q. M. Sergt.) ..	8 ,, 10
Sepoy	7-8 ,, 8-8

Artillery and infantry were paid at the same rate, but mounted men who supplied their own horses received Rs. 22/- per month.

Though the scale of pay was about the same as that of the Indian ranks of the Company's army, the soldier of the Khalsa was infinitely worse off, for whereas the one was paid regularly, and honestly, the other only received his dues at long intervals and even then only in part. From this modicum, more cuttings, varying with the capacity of pay clerks and officers who worked in collusion, were deducted. Though the intervals were fixed at four months it was usually eight before anything at all was paid, and, as will be seen from the ensuing pages, very frequently eighteen months and even two years elapsed before officers and soldiers received anything.

How the men lived may be imagined from the acknowledgment of Maharajah Sher Singh, that " the passage of a Sikh Brigade was worse than that of a flight of locusts," which was made in open Durbar shortly after his accession. But this system of perpetual arrears and short payments was not peculiar to Ranjit Singh and his successors for, with the exception of the brigades of regular troops commanded by the European Generals in the services of Tippoo, the Nawab of

Hyderabad, Scindiah and Holkar, the standing armies of Indian rulers were similarly treated.

It should be remembered that until the middle of the Eighteenth Century, Asiatic armies were either feudatory troops or levies *en masse*, costing the ruler nothing (in cash) to maintain in peace and living on the country in war. When the necessities for warfare on European standards were forced upon them entailing standing armies of trained troops, they would not, or could not, understand the necessity for regular payments, and evaded them as much as possible. Hence De Boigne, Perron, and Raymond insisted on the assignment of districts yielding a sufficient revenue, which were administered by themselves. The history of native state armies during this period teems with instances of mutinies for pay similar to those now to be chronicled.

Until about six years before his death Ranjit Singh appears to have paid his standing army fairly regularly, for there are no records of mutinies on this account. But with increasing age, his natural avarice so overcame him that he would pay nothing he could possibly avoid, and in this matter his army suffered worst. These are a few instances. In May 1836, two battalions returned from garrison duty in Kashmir eighteen months in arrear, and, in full settlement, were offered three months' pay by their commander, Raja Kharak Singh, son of Ranjit. On their refusal being reported to Ranjit Singh, the commander was told to *pacify* them which he did by surrounding the mutineers with *jaghirdari* troops and opening fire on men having no ammunition. Twenty were killed at once, thirty wounded, and ten more drowned in attempting to cross the Ravi in their flight.

Even this matter was turned to profit by Ranjit Singh, for he fined the commander Rs. 40,000, of which Rs. 100 was paid to the relatives of the killed and Rs. 50 each to the wounded, so leaving a substantial margin, for the men never got their arrears, being possibly glad to depart without more loss. In 1838 he owned to Captain Osborne, a guest with him, that he had just disbanded some battalions eighteen months in arrears, who had taken to plundering for subsistence. In 1837, the cavalry regiment of Jemadar Khushal Singh protested against a cut of ten rupees in their pay for the benefit of the commander, upon which he turned two guns upon them and mowed a number down.

Besides the peculations by the clerks and officers the ruler himself exacted forced contributions for all occasions of state, such as weddings, births, and other rejoicings, deducting them from the amount owed. There are other cases which might be quoted to show how the soldiers of the Khalsa were ill-treated and robbed by their employer and natural protectors, the officers, but these will suffice to show that the guilt for the condition into which the army fell soon after the death of Ranjit Singh was his own. Not only this, but his lifelong policy of eliminating every Sikh of talent, and trusting only to aliens, left none, individually or collectively, capable of ruling the country, save the Dogra Rajas whom neither army nor nation would accept as their supreme head.

Even before his death the spirit of mutiny was abroad, especially at Peshawar where the Ghoorkha battalion of Ventura's brigade turned their commander, Jacob Thomas, son of the renowned George, out of camp, took their guns, and marched back to Lahore to demand their dues; an example followed by others, though they did not quit their stations. Very soon after the death of its founder, the Sikh nation commenced its decline to a fall within seven years. Within seventeen months two successors had died violent deaths and a third had been cheated out of his inheritance, whilst a number of nobles and others were done to death by the contending factions.

During this period the troops stood by fairly quietly save for sporadic outbreaks on account of arrears, appeased by part payments. But they were fermenting with discontent and ready to support anyone who would pay their arrears and promise fair treatment and regular payment in future. For some time before his own appearance the agents of the dispossessed heir had been circulating amongst the troops on his behalf, with the result that when, on the morning of the 19th of January 1841, he appeared in their camps, they enthusiastically accepted his offer of an increase of pay to Rs. 12 per month, payment of all arrears, and a bonus of four months' pay for their aid in placing him on the throne.

The next day some 25,000 troops with over 150 guns, disdaining all control or leadership by their officers, tumultuously besieged the Regent Rani and the hostile faction in the Fort of Lahore defended by Raja Golab Singh, Dogra (later of Kashmir). The details do not concern the narrative save that the lesson taught by the severe losses due to want of leadership, or co-ordination, had much to do with the

future position of the officers whose value as trainers and leaders was recognised. Baulked in the first attack owing to the loss of all their gunners who were ranged with their guns in the open about one hundred yards from the ramparts, the soldiers turned their attention to the city, wherein they murdered, burnt, outraged and plundered indiscriminately in the intervals of the siege of the Fort. Worst of all, they now turned upon the officers and writers, who for so many years had robbed and oppressed them, and wreaked a fearful revenge upon them and all their belongings. On the fourth day the garrison surrendered on terms and, taking advantage of most of the troops being away plundering the city, got safely away at midnight with a vast amount of treasure taken from the Treasury by Raja Golab Singh. After about seven days plundering the satiated troops returned to their lines for a few days, after which they commenced to agitate for the performance of the promises made to them. They were offered, and accepted, on account, a sum of Rs. 10 to each man, with Rs. 50 for the wounded and Rs. 100 for the relatives of the dead.

Finding no more offering, on the 30th January near upon 30,000 soldiers of all ranks and classes assembled on the parade ground outside the Fort and demanded a settlement of all the promises, and their arrears, threatening to storm the fort and kill the new Maharajah and his faction if they were not paid. In the end twenty lakhs of rupees were distributed, with which, satisfied for the moment, the troops returned to duty, or what passed as such. Still there was much owing to them, and now realising that, for self-preservation, as well as successful negotiation, some system of government, and continuance of training, was absolutely necessary, the troops adopted the system of village councils, or Punchayets, so familiar to them in the villages from which the great majority came. As to what these were, and how they functioned let me quote an official report by Mr. Clerk :

"6th October 1841.—At the present time the administration and training of the Army of the Khalsa is carried out by their Punchayets, under whose orders act the commandants, adjutants and other officers of the army generally. These bodies consist of two men from each battery, troop, or company, and virtually form the governing body in the State as well as the Army. All those of each regiment are in constant communication with each other, and their duties to each other and the State are determined by the members, all of whom are private soldiers elected by the regiments. The same system has been

adopted in the irregular horse, though these are subordinate to the infantry, who are the most powerful and influential."

The following report written by Colonel Richmond, successor to Mr. Clerk, shews that the system had come to stay;

"2nd January 1843.—The officers of the Lahore Army have very different functions from those of any other army in the world. Though they are responsible for the training, give the necessary commands on parade, and lead in action, they dare not punish, nor reward. Nor are they permitted to have anything to do with the accounts or interests of the men, these duties being supervised by the Punchayets, composed of men from each company who, occasionally with the whole regiment in council, decide all matters connected with the corps. Nor are the officers permitted to reward or punish, this being only permitted by the general voice of the Punchayets, or the regiment. Civilians having dispute with the soldiers must appear before these tribunals, who, naturally, enforce no decision unfavourable to their clients. The members are changed at intervals."

I conclude the official quotations with one from Major Broadfoot, written in the last year of the full existence of the old Army of the Khalsa:—

"16th March 1845.—In the Anarchy now prevailing in the Punjab, there exists a singular species of order within disorder, the former being maintained by the Punchayets which consist of two men from each company. Except in moments of tumult, these men use the language of subordinates, though, substantially, they command. They profess to require a ruler, as well as a leader, declaring that, without order and subordination, neither state nor army can endure. Up to now they have shewn no desire to give the supreme power to any one of their own body, and though their excesses, in the matter especially of women, in the campaigns in the hills were great, they still maintain sufficient order as to attract grain dealers and shopkeepers whose prosperity is scrupulously respected."

"Again, though their officers are looked upon more as equals than rulers, their orders are scrupulously respected and obeyed, and their authority, in carrying out the orders of the Punchayets, upheld and enforced. Such an appearance of order within disorder, is apt to confuse and perplex Europeans especially when coupled with flagrant mutiny, unless they are acquainted with the Indian agricultural

society from which these men are drawn. The system is due to the instinct of self-preservation, and to the habits of self-government acquired by the landowning peasantry in their villages, and its adoption has bound the regiments together in a manner surprising to those not acquainted with rural India."

To return to the period before the Punchayets had gained authority enough to prevent excesses on the officers. The outrages and murders of the officers soon spread to the outlying garrisons and expeditions. In Kulu, Colonel Foulkes was murdered by his men and two other European officers, Holmes and Mouton, only saved by the devotion of the wife of the Frenchman who gathered a few loyal soldiers and rescued them from the camp where they had gone to attempt to save Foulkes. In the Hazara, Major Ford, commanding a battalion, was so maltreated by his men that he died, whilst in both places a great number of Indian officers and writers were killed. At Peshawar a number of similar outrages occurred, though apparently the number was minimised by the presence of the ferocious old Italian, Avitabile, who dealt faithfully with a battalion of mutineers a trifle later.

In Kashmir the Sikh garrison broke into the Durbar Hall with their demands, and when these were refused cut down the Governor and burnt him whilst yet alive. But both at Peshawar and Multan the mutineers came off badly, for at each place there were Pathans ready and very willing to attack the Khalsa soldiers for sufficient inducement. At the former place Avitabile, after paying part of their demands to a battalion refused the remainder, and that night turned loose thousands of Khyberees upon them, their reward to be the Rs. 100 or so each man had upon him. After much bloodshed the battalion surrendered, returned the money, and were then disbanded and sent to Lahore to be absorbed into other battalions. At Multan the Governor behaved similarly, with the exception that the Sikhs were then given leave in small parties each of which was way laid on the road, robbed, and sent back to Multan to work on the roads and ditches in chains. There is another account of the inauguration of the Punchayets by Carmichael Smyth who obtained his information from an adventurer named Gardiner, who served Golab Singh and others for many years. This runs :—

"Very soon after the accession of Maharajah Sher Singh, the soldiers clamoured for the fulfilment of his promises, which he could not, or would not, grant in full. After much angry discussion they

agreed to take one rupee per month of increase and one month's pay as bonus. In lieu of the balance, they demanded permission to attack the Camp of Raja Golab Singh, and recoup themselves from the treasure he had carried off from the fort and would have done so, but for the timely arrival of 10,000 hill men to re-inforce him. Thus cheated on the one side and baulked on the other, the Sikhs were in such an angry mood, and became so clamorous when Sher Singh visited their camp, that he told them to send two men from each company, battery, or troop to represent their grievances. It was proposed by Raja Dhian Singh (the Wazir) that the officers should be included. But to this the soldiers would not consent, and confined the officers to ensure their absence. At this conference, the deputies set forth their claims and the Durbar offered terms, though nothing was settled owing to the delegates having to consult their regiments, etc. Matters seemed to have settled down a trifle when Sher Singh visited the camp, but it was not so, for now the soldiers gathered round and told him there was yet a very serious matter to be settled. They said that during the lifetime of Ranjit Singh they had been very badly treated by a number of officers and writers, whom they would tolerate no longer. Therefore these men must be surrendered to them for punishment, or at least sent away to other corps willing to take them. They were given permission to do as they liked in each case. Great confusion now arose as to what officers each regiment should keep and what they should get rid of. One refused to take officers obnoxious to another, whilst a second refused to give up officers demanded by a third. Such a tumult eventually arose that the drums beat to arms, and the men rushed for their muskets. At last, Sher Singh left the camp, telling the men to do what they liked in the matter. These words were the death warrant of many an officer and writer, for the soldiers proceeded to murder all against whom they had any complaint. " Soon the Punchayets got entire control of the State and the Army for, having great power, the leaders were at their command. This power they used for their own benefit selling appointments to the highest bidder only to side with the one they preferred when the decision had to be made."

But, though fairly correct, this is not entirely so, for the troops commenced the murders and set up the Punchayets without any permission, as the daily news letters to Ludhiana from Lahore shew clearly. Nor were the Punchayets absolute, for there are

several reports of punishments inflicted upon them by their clients, in one case half a dozen being bayoneted for making an unsatisfactory agreement. Usually, however, the punishment consisted in their faces being blackened, the men shoe-beaten, and ridden out of camp on a donkey.

The first bargain was the sale of Sirdar Jowala Singh for Rs. 30,000 by the troops who had joined him in a rebellion against some injustice (to both him and them), and the second the handing over of two more obnoxious sirdars, for the sum of Rs. 5,000 cash and six months' arrears. After this the Punchayets seemed to have got full control and mass bargaining ceased, though the consent of the body of troops was essential. This was obtained to an expedition to Kashmir, ostensibly to punish the mutineers, but really to recover the vast treasure the late Governor had collected. In sanctioning this, the troops stipulated that no punishment should be inflicted on the mutineers except by themselves, and when Raja Golab Singh, to whom curiously enough the expedition had been entrusted, lost his temper and exterminated the lot, they became exceedingly angry and fined him twenty lakhs (which he never paid).

But there is the case of the four mutinous battalions who took possession of the Attock Bridge and road with the intention of paying themselves by the plunder of any convoys that came along. They had already plundered three lakhs from a convoy for Peshawar, when intimation of the approach of a great convoy of nine hundred persons belonging to the Zenana of Shah Shuja came to the Political officer at Peshawar, Captain Mackeson. This officer wrote to the Punchayets asking them to permit the convoy to pass. To his very courteous letter, he received an equally courteous reply in which the regiments agreed to his request and, to give more confidence, actually left the road and camped on the right bank of the Indus above Attock. Unfortunately, this action caused the death of many, for over two thousand were drowned in the great flood which swept the country in July 1841.

During the next two years there is a sorry record of almost continual disturbances for arrears of pay, for the same old system was continued despite the known dangers. Though the army was bad, the condition of the rulers and the court was infinitely worse. Debauchery, license and squandering of public monies went on, with the result that the money due to the troops was squandered. The Court and

Durbar were avoided, or merely tolerated by the more sober and responsible elements, and became the Elysium of the scum, a condition which endured until the end, becoming worse, if possible, under the last Regent Rani, whom Henry Lawrence described as a compound of Faustina and Messalina, but worse then either.

For a time the Wazir, Raja Dhian Singh, strove against the tendencies of the Court, though he too refused to pay the soldiers. At last, the tension between him and the Maharajah became so great that each plotted to destroy the other, but the assassins whom both engaged, murdered, first, the Maharajah and his son, and then the Wazir, both within a few hours of each other. They then shut themselves up in the Fort of Lahore which they had gained over from a section of the troops. The remainder numbering about 20,000 at Lahore were then induced by a renewal of the old promise of increases and bonus, to attack and take the fort. This they followed up by again plundering the city for many days.

Six months later they were induced, by a substantial consideration, to attack the uncle and rival of the new Wazir, whom they murdered with all his followers, taking 15,000 men and twenty guns against 300 men without any guns. The next engagement of the troops was to destroy an Akali priest named Bawa Bir Singh who led a raving band of some 3,000 Akalies and Nihungs, all living on plunder. This man had been joined by some of the out-of-power faction who persuaded him to excommunicate the infant Maharajah and all his supporters. By a promise of a gold mohur to each man, and a gold necklet to each of the officers and Punchayets, the troops were induced to march against the Bawa, who, with nearly all his followers, was killed, the slayers consoling themselves for the sacrilege with the vast booty the Bawa had taken from others.

Not long after, intrigues and bribes, together with the non-payment of their dues, turned the soldiers against the new Wazir, Hira Singh, who was chased for twenty miles from Lahore, and with all his followers, some 200 in number, killed and beheaded. The heads of the principals were brought back to Lahore on pikes, and, after the usual ignominous treatment, given to the dogs of the city. Meanwhile, the Court grew worse. None would accept the Wazirat as too dangerous, until at last the Regent Rani made her brother take the appointment on her behalf. Like herself, he was of the

dregs, she having for years lived in the purlieus of Amritsar, and had lovers innumerable.

The details of the iniquities of the rulers are too much to insert here, so we may pass on to the fall of Jowahir Singh, brought about by his own disregard of the claims of the troops, and his murder of one of their favourites who had become a rival. Early in September, the Wazir was arraigned on the following counts, to answer which he was directed to appear before the Punchayets.

1. "That Peshora Singh (his rival, and son of Ranjit Singh) be immediately released.
2. Fulfillment of the promise that the pay of the troops should be increased, and each man given a gold bracelet, when they had given up Raja Golab Singh (another dangerous rival).
3. To show by what authority he had broken up the Brigade of Jemadar Khushal Singh.
4. To account for his having permitted Raja Golab Singh to depart without permission from the troops, and hand over the money he had received on that account.
5. To explain why, on being summoned by the troops to hear their grievances, he had not done so, but fled after reaching the artillery (They had attempted his life).
6. To explain why he had limited his confidence to the Ventura Brigade.
7. To account for his having carried off the guns of the artillery when they were on leave and for keeping 400 guns in the Fort of Lahore, where Ranjit Singh had never kept any.
8. To account for having ordered the troops to march against the English, when he and the other sirdars were afraid to lead them.
9. To answer for his having sent Lal Singh to Ferozepore to offer tribute to the English if they would invade the Punjab and destroy the army of the Khalsa. But they were not such fools as to attack the English, who had not injured them, save at the bidding of the whole nation expressed at the Dasehra.

10. To account for his having assumed the post of Wazir, for which he was quite unfit, when the troops had given the post to the Rani herself.
11. To answer for his disregard of the rule made by the troops after the deaths of Maharajah Sher Singh and Raja Dhian Singh, that all matters of State were to be settled by the ministers and sirdars in council with the Punchayets.
12. In conclusion, though the troops were well aware that Sirdar Jowahir Singh had neither sense or understanding, they require a full account from him."

On receipt of this extraordinary document, the Wazir, depending on the support of the three battalions raised for him by the adventurer Gardiner, and the reserve artillery men, sent a defiant message to the Punchayets, who, on receipt, formally condemned him to death. For the next few days he remained in the fort until the messengers sent to ascertain the fate of Peshora Singh arrived with the news of his death. Next morning the Wazir was summoned to appear at Mian Mir to meet his fate, and, two days later, finding that his own men, though they took his bribes, would not defend him he accepted the inevitable and went out to Mian Mir with his sister, and the young Maharajah, relying on them to avert his fate.

He was at once murdered, and his body mutilated. The next day the troops formally assumed the Government in the name of the Khalsaji da Punth, the title of the Sikh nation before the rise of Ranjit Singh, and issued documents requiring submission to their orders from all civil and other officers, these bearing the name of *God* only. We must, again, for considerations of space, omit much worth recording and pass on to the final act. Owing to the squanderings of the Court, and the increase of the army to nearly double the numbers of 1841 (added by the men themselves), the small amount of revenue collected from a country in anarchy was quite insufficient to meet the demand upon it. Daily the attitude of the troops became more menacing to their so-called rulers, who in very self-defence spared no means to incite them against the English. At last, by representing that their own country could no longer support them, and pointing out that the rich lands of Hindustan, were guarded only by a few British and Indian soldiers who had recently been beaten by the Afghans, they induced the men, in spite of the efforts of some of the Punchayets who knew the inevitable result, to march against the English. The

result is well known. In conclusion, let us quote some extracts which will shew the condition of the army of the Khalsa after five years of Punchayet rule.

Henry Lawrence. "At the first battle the English were surprised by finding themselves confronted by steady ranks of infantry giving forth a fire as rapid and effective as their own, whilst the artillery was even better; their guns, by reason of heavier metal, out-ranging the English. The Sikh battalions formed to receive cavalry in a novel manner, this being a triangle instead of a square. The result of this formation was that when the apex was broken, the cavalry found themselves opposed by another line of unbroken infantry, from whose fire they suffered greatly. Even the Sikhs who had been ridden over, flung themselves on their backs and disembowelled or hamstrung the horses as they passed over, so having the dismounted men at their mercy. When the Sikh infantry sullenly retired before our own, the bodies of the victorious cavalry were more thickly strewn than those of the beaten infantry."

Cunningham. "The guns of the Sikhs were served with precision and rapidity, and their foot soldiers stood between and behind their guns, firm in order, and active with their muskets. The resistance met with was wholly unexpected and all started with astonishment. Gun were dismounted and ammunition wagons blown into the air; squadrons were checked in mid-career; battalion after battalion was hurled back with shattered ranks, and it was not until dark that the enemy's position was taken. For the first time, our Sepoy mercenaries had met an antagonist using their own methods and weapons, *i.e.*, equal ranks of infantry and the effective fire of artillery and musketry."

As showing that the collective efficiency of the Khalsa was equal to their individual bravery, we may quote the remarks of another officer, Major Hough. Though this refers to the Second Sikh War, the battalions were the survivors of the original Khalsa Army not engaged in the First War, which was fought by the troops *south* of the Ravi. The second was fought *north* of that river by the troops from the Hazara and Peshawar.

"An officer, who was taken prisoner in the late war, told me that the march of the Sikh Army from the neighbourhood of Chillianwallah was one of the finest military movements he had seen. The Sikh commander first passed his baggage well to the rear of his line of

march and then commenced his retreat, keeping his line of battle intact. Each battalion kept perfect alignment and distance for the whole twenty miles, and so perfectly was the order of battle march preserved that the captive fully believed that the British Army was marching parallel with the Sikhs, instead of being still in camp at Chillianwallah."

It should be explained, before closing this article, that the acceptance of their peculiar position by the Sikh officers was due to the fact that in all Asiatic armies there was no direct entry to the officer ranks by, what is called in Europe, the "officer class." All came up through the ranks and there are many instances of those entering as common soldiers attaining the highest commands.

Hence it was possible for such officers to accept a position intolerable to those of European armies. None of the Europeans in the service of the Khalsa would do so and all left soon after they realised its permanence. The exemplary conduct and discipline of the Sikhs who fought for us in the Mutiny, shew that such men, many of whom had belonged to the army of the Khalsa, were quite amenable to regular pay and decent treatment, as indeed are soldiers of all nations.

THE DISARMAMENT CONFERENCE.

By Captain J. B. Bettington, M.C., King's Shropshire Light Infantry.

The attention of the World will soon be focussed upon the Disarmament Conference which assembles at Geneva on February 2nd, 1932. This article is an effort to set forth very briefly the origin of the Conference, its remarkable international importance and the very great difficulties with which the delegates will be faced.

The Treaty of Versailles left the Nations pledged by Article 8 of the Covenant of the League of Nations to the principle of the reduction of Armaments. It reduced the Central Powers to virtual military impotence, but it left the victorious Allied Nations with unrestricted Naval, Military and Air Forces. During the deliberations before the signing of the Treaty the Allied Nations made the following observation :—" The Allied and Associated Powers wish to make it clear that their requirements in regard to German Armaments were not made solely with regard to rendering it impossible for Germany to resume her policy of military aggression. They are also the first steps towards a general reduction and limitation of armaments .....which it will be one of the first duties of the League of Nations to promote."

Since the signing of the Versailles Treaty the naval treaties of Washington and London have achieved considerable success in the field of naval disarmament. Nothing, however, has been done with regard to the far more difficult and complex problem of the limitation of land and air forces. On the other hand, since 1924, the general tendency has been for all governments, except those within the British Empire, to increase considerably their military expenditure. In particular the air forces of the continental powers have expanded with great rapidity ; Great Britain, which ended the War with an Air Force which was rapidly becoming the most powerful in the World, has now dropped to the fifth place among the air powers.

The Treaty of Locarno and the Paris Pact have done a good deal to make war less likely. In the latter Treaty the Nations have reasserted their will to peace and their determination to refrain from war as an instrument for the promotion of international policy. But pious assertions are of little value when armaments continue to grow

with their inevitable accompaniment of international jealousy and suspicion. In 1925 the Assembly of the League passed a Resolution "to make a preparatory study with a view to a Conference for the reduction and limitation of Armaments." This Resolution led to the establishment of the Preparatory Commission for the Disarmament Conference which finished its work in December last year. It is beyond the scope of this Article to describe the difficulties which were encountered by the Preparatory Commission. They were many and complex. Some of them were left unsolved. The Commission has, however, produced a Draft Disarmament Convention and this will form the basis upon which the Conference will begin its labours.

The Draft Convention is divided into a series of Parts. Part I, Chapter A, deals with the limitation of personnel in the Fighting Services. Personnel are to be calculated for purposes of limitation by "average daily effectives." "The average daily effectives are reckoned by dividing the number of days duty performed in the year by the number of days in the year." This provision means that there is no restriction whatever with regard to reservists who do no annual training. This is an aspect of the Draft Convention upon which further comment will be necessary later. In this part of the Convention are a series of Articles which, subject to the limitation with regard to reserves, bind the contracting parties to restrict the total strength of their personnel to certain fixed maxima to be agreed upon at the Conference.

Part I, Chapter B of the Draft Convention arranges for the limitation of the periods of service in conscript armies, and is consequently of no direct interest to the British Empire whose representatives have frequently stressed the view that until conscription is done away with effective disarmament is almost impossible. Part II is concerned with the limitation of war matériel. Under the first Article the contracting parties will bind themselves to a definite limitation of expenditure on the upkeep, purchase and manufacture of war matériel. There follow chapters dealing with the limitation of naval vessels by categories and of service aircraft by numbers of machines and by aggregate horse power. In Part III are provisions for the limitation for budgetary expenditure on land, sea and air forces. This Article is to be implemented by curtailment of expenditure under certain fixed heads as laid down in a model statement prepared by a Committee of Budgetary Experts.

In Part IV are clauses under which the signatories will bind themselves to publish at stated periods information with regard to their strength in personnel, their budgetary expenditure and details of any new naval or air construction which they may undertake. Under Part V they will undertake subject to reciprocity to refrain from Chemical Warfare, and unreservedly to abstrain from bacteriological methods in War. Part VI contains miscellaneous provisions for the formation of a Permanent Disarmament Commission, for derogations and for methods whereby complaints are to be registered.

This Draft Convention will afford the Disarmament Conference a useful basis, but it leaves severely alone several of the problems which are likely to prove stumbling blocks to a satisfactory agreement. The most important omission is perhaps the failure to impose any limit to trained reserves. This omission is the result of the opposition of those countries whose forces are raised by conscription. It is true that every conscript is counted amongst his country's effectives during his period of service with the colours. Consequently the number of serving conscripts is subject to limitation. As soon however as he passes into the reserve he is not counted amongst his country's "daily effectives" except during the short period, if any, in which he may be called up for training. When considering this question it must be remembered that the continental conscript armies rely in war primarily upon their reservists and not upon their serving personnel. Consequently the Draft Convention provides a most misleading basis for comparison between a long service professional army and a short service conscript army. In precisely the same way budgetary figures do not give a true comparative picture, for the pay, rations and amenities which will suffice for conscripts, are inadequate for voluntarily enlisted professional soldiers. The ease with which figures can be manipulated was well illustrated in the recent debates in the French Chamber when some speakers actually claimed that the French Army was smaller than the British. They based this claim upon figures which carefully omitted all reference to French reservists who practically constitute the manhood of the Nation and run into several millions, while every regular, territorial and irregular in the British Empire was counted.

Another difficult point relates to civil aviation. Under certain articles of the Draft Convention the nations are asked to "refrain from prescribing the embodiment of military features

in the construction of civil aviation material." There are also clauses which will ensure the publication of information concerning civil aircraft. There is a body of opinion which asserts that civil and military aircraft design is diverging so fast that civil machines wil soon be useless for military purposes. Still it cannot be denied that commercial aircraft in the air are a much more potent source of danger than merchant ships upon the sea. In addition the provisions of the Draft Convention which limit the engine power of service aircraft are dangerous ; for the nearer the performance of civil machines approaches that of military, the greater is their potential value in war.

Another point upon which the Preparatory Commission failed to reach a satisfactory agreement was that relating to the direct limitation of war matériel. The most logical and simple method would have been to have included clauses fixing definite maxima for all important classes of war matériel, guns, tanks, machine guns, etc. The design of war matériel, is, however, constantly changing. Nations not unnaturally are averse to making public their latest developments. For this and other reasons no agreement could be found.

Enough has been said to show the lines on which the technical problems of limitation will be attacked and the difficulties involved. These, however, are not the most fundamental difficulties with which the Conference will have to wrestle. The basic questions upon which the whole matter rests are political. Until a solution is found to the present state of international tension no amount of technical unanimity will be of any value. A few notes on the present European situation may perhaps therefore be of value.

There are in Europe at the present time three major questions which lead to international friction. These are the Franco-German problem, the Franco-Italian problem and the Russian problem. These problems are to some extent co-related.

The position of Germany may well prove the crux of the whole question. As already mentioned the Treaty of Versailles left the Central Powers virtually in a condition of complete disarmament. The German Army is limited to a maximum of 100,000 men, conscription is illegal, and resort to volunteer forces is forbidden. Armoured fighting vehicles of all sorts are forbidden as are all guns of over 4-inch calibre. Preparations for chemical warfare are not permitted and machine guns and small arms are rigidly limited in number. The

German Navy is limited to a little over 100,000 tons in all and she is allowed to construct no vessels over 10,000 tons. Submarines are forbidden. She is allowed to maintain no military aircraft of any kind. She may not manufacture armaments of any description forbidden by the Treaty nor is she allowed to manufacture arms for export.

Tied down by these rigid restrictions she finds herself surrounded by a ring of heavily armed states under the dominance of France. France and her satellites, the " Little Entente " and Poland, can put in the field at short notice forces over a hundred divisions in aggregate. They can mobilize air forces amounting to over 2,000 machines. In addition, Germany finds a constant source of irritation in the question of the Polish corridor. In these circumstances it is not surprising that the German people are united in their determination to end their present state of impotence, and in their belief that the Allies have failed to implement their promises given at the Versailles Conference. They will never agree to a Convention which perpetuates the present state of unilateral disarmament. If agreement is not reached there is the very real danger that Germany will be forced into an aggressive alliance with Russia or Italy against the French *bloc* of powers.

The renaissance of Italy has led to increased antagonism between France and herself. Their interests clash in the Mediterranean and in Africa. The politicians of the Fascist regime are apt to indulge in flamboyant speeches more with the object of raising national *morale* than with a view to irritating their neighbours. The hostility between Italy and Jugo-Slavia is a source of danger. France would probably never allow the former to crush her eastern neighbour. There is a definite tendency for Italy to range herself alongside Germany or even the Soviet against France. Perhaps the greatest safeguard in this direction is Italy's comparative financial weakness.

Russia is perhaps the biggest stumbling block to disarmament. She possesses the greatest standing army in the world, backed by unlimited resources in man power. With her rapidly expanding air force, numerically at least she already stands equal second with U. S. A. amongst the World's air powers. Her whole policy is imbued with a hatred of western civilization and her people are brought up in the belief in the inevitability of war for the overthrow of the

capitalistic system. The bulk of her Army and Air Force is stationed on her western frontier where she faces the French satellites of Eastern Europe. At present her poor communications and her undeveloped industries militate against the efficiency of her Army, and, as formerly, her mobilisation will be slow and cumbrous. She is making great efforts to overcome these difficulties, however, and the successful conclusion of the " Five Year " plan will do much to dissipate these disabilities.

A few years ago when attending a meeting of the Preparatory Commission she proposed a scheme for universal and total disarmament. Such a plan was of course totally impracticable and she received no support except from China. She has utilized the repudiation of this scheme as an excuse for propagation of the idea that the western nations are bent upon war against her. There seems every reason to believe that she will use every device to attain a military alliance with a disgruntled Germany. Faced with her great and expanding military forces it is quite impossible to expect any measure of reduction of armaments by Poland and the " Little Entente."

There remains the consideration of the position of France and her Allies in Eastern Europe. France has always asserted that disarmament is dependent upon security. She recalls the invasions of 1914 and 1870, not to mention 1813 and 1815, and she is determined to run no risk of further incursions from the East. She asserts that her armaments are purely protective. She is not aggressive and only wishes to keep what she has got. Everyone can sympathise with her arguments and there is no doubt that her intentions are pacific. It is a question however whether she is not at the present time over—insured. In her efforts to assure her own security she has hedged Germany with a ring of hostile powers. By the Treaty of Locarno she has gained a very strong safeguard against German aggression in the future. Belgium is her firm ally and Great Britain is pledged to assist her in the event of further invasion by Germany. That her conscience is not quite at rest is seen by her efforts, which are not always quite disingenuous, to spread the theory of her own efforts towards disarmament. It is true that as a result of her alliances and the Locarno Treaty she has been able to reduce the period of her conscript service from three years to one year. This has resulted in a considerable reduction in the numerical strength of her conscript army. But this

reduction has been accompanied by an increase in her professional element and has in no way reduced the strength of her trained reserve which is her real insurance against aggression.

It will be the task of the Disarmament Conference to induce her to enlarge her international vision. She will have to realise that no great nation like Germany can agree to a perpetual condition of impotence *vis à vis* her neighbours, and that it is only by promoting international goodwill that war can be made impossible.

In the preceding paragraphs an attempt has been made to set forth the importance of the Disarmament Conference and the great difficulties which will have to be overcome before success can be achieved. A failure will not only do no good but may even bring a great war appreciably nearer. Before concluding it may be of interest to include a few remarks with regard to India's position at the Conference. As a member of the League of Nations she will send her own delegation and will have to state her own case which is in many respects unique.

India in common with other members of the British Commonwealth has since 1922 considerably reduced the strength of her defensive forces. There has not, however, during the same period been any corresponding reduction in the complexity of her defensive problems. The Defensive Forces of India are faced with the dual rôle of protecting India from external aggression and of maintaining internal order in India and Burma.

On the North West Frontier the ever present problem of controlling the Frontier Tribes has still to be faced. Along the Frontier are over half a million fighting men equipped with not less than 200,000 modern rifles and ample supplies of ammunition. These tribesmen for generations have known no master and have been accustomed to look upon the plains of the Indus as their legitimate hunting ground for loot. They are fanatical Moslems who regard the slaughter of the infidel as the surest means of attaining salvation. International treaties and the ideals of Western civilization are quite beyond their ken. They believe in force and they respect force and any doctrine which fails to recognise this fact will lead to inevitable disaster. The history of 1930 is ample proof that the security of the people of the settled districts along the frontier depends upon the presence of a strong and ever-ready Army and Air Force.

Behind the independent tribes lies Afghanistan. The present ruler, King Nadir Khan, has proved a loyal friend of India and the British. In Afghanistan, however, the political situation changes quickly and drastically. Dynasties are unstable and the policy of one ruler is often reversed by his successor. In 1919 Amanullah, on the murder of his predecessor, immediately took advantage of the disturbed state of India and her pre-occupation in demobilization to launch an invasion upon the North West Frontier. There is no saying when history will repeat itself.

Behind Afghanistan is Russia. Her antagonism to Western Civilization and Great Britain in particular has already been mentioned. She may well take advantage of a change of policy in Afghanistan to instigate an attack upon India: or she may herself attack Afghanistan. India cannot afford to see the latter fall under the dominance of the Soviet.

In the interior of India the rapid advance towards self-government, which is now in progress, has done nothing to assuage the ancient feud between the Moslem and the Hindu. If anything, racial feeling has been accentuated as has been recently proved at Cawnpore and in Kashmir. The responsibility of the Army to keep the peace in the worst emergency remains unchanged. In Burma and on the North East Frontier the problem of protection against external enemies is simplified by the almost impassable mountain barriers. Recent events in Burma have, however, proved that the ignorance and superstition of the Burmese still constitute a menace to internal order. As a result of the recent rebellion it has been necessary to despatch to Burma six battalions from India's already slender Field Army.

These then are the peculiar circumstances in which India finds herself when she considers the question of a reduction of her defensive forces. It seems most improbable that she will be able to contemplate, or indeed will be called upon to make, any further reductions.

TWO RECENT ACTIONS AGAINST AFRIDIS.

I.—The Night Operations against Spintigga.

10/11*th March* 1931.

Reference :—Map " A "—Sketch map of Aka Khel Plain.

Map " B "—Sketch map Mandai—Spintigga Area.

Throughout the Autumn of 1930, the primary efforts of Khajuri Force were directed to reconnaissance for and construction of roads over the Khajuri and Aka Khel Plains. During the whole of that period there were considerable bodies of Afridis in the cave areas which lie along the foot of the big hills fringing the two plains. The tribesmen were sent down regularly in reliefs by the Khilafatists to worry the troops. When troops went out on reconnaissance or to cover working parties on the roads abutting the hills, small engagements with Afridi bands were an almost daily occurrence, especially south of the Bara River where lie, at the foot of the big Aka Khel Range, and connected together laterally by a covered way, the cave villages from west to east of Miri Khel, Alam Killi, Ghazai Killi, Nawe Garhi and Mandai. This big Aka Khel Range rises steeply 1,500 to 2,000 feet above the plain, and below it is a succession of huge nullahs running south-west to north-east. These nullahs are on the average 80 feet deep and 200 yards broad.

The Afridi is an opportunist and awaits his chance, and, true to his usual tactics, in each of these engagements, he waited until he knew it was about time for the troops to commence their retirement to camp, and it was usually about 2 p.m. before he appeared to follow them up. Faced with modern machine guns, howitzers and armoured cars, he wisely would not venture far away from the hills, and although he incurred many more casualties each time than the troops, he never risked the chance of being punished heavily.

After the New Year 1931, the urgency of road construction was slowed down. Further, the orders of higher authority were to be as offensive as possible and to do the Afridi the maximum material damage. The Afridi is as cunning as a fox and it is hopeless to attempt to outflank or envelop him by daylight. True, in a well ordered retire-

ment one can in favourable ground, draw him on, and with modern weapons inflict some casualties on him. But to bring off a "coup" and to make a bag one must "mystify and mislead." The utmost secrecy and stratagem and movement by night give the only chance. By surrounding at night a village among the hills which he thinks cannot be reached, the troops may kill or capture a large number and can carry out the maximum damage to property which, even if of no great value, is with difficulty replaced by this extremely poor race.

Night Operations.

The Nowshera Brigade or parts of it, carried out four such night operations with success during the spring of 1931, advancing across difficult hilly and very broken country by night and surrounding well before dawn, the villages of Zao, Alam Killi, Miri Khel and Spintigga. All these operations afforded most valuable lessons which there is no space to deal with here.

Unfortunately, on account of the Id after the New Year, the Afridi bands became much smaller. Never once was a bag made as it would certainly have been had these night operations taken place before Christmas.

Zao.

Against Zao, a favourite resting place for gangs whence three main tracks into British Territory diverge, it had been the intention to carry out a night operation from Matanni 8 miles away before the Brigade arrived within gun range of the village. Road construction was however urgent and the operation could not be carried out until 5 days later when the Brigade was at Garhi Jani 5 miles away by tracks, 3 miles in a direct line. The birds who had numbered over 100 in the village a few days before had flown and after a most difficult and most successful night operation only 3 Afridis were found in the village and dealt with.

The feature of this operation was the use made by the two leading battalions of air photos for the night march across very broken and unmapped ground which could not be previously reconnoitred.

Alam Killi and Miri Khel.

The operations against Alam Killi and Miri Khel were both made from Camp about 5 miles away. The greatest care was taken to ensure that these areas were left undisturbed by gunners, the

Air Force and the troops for many days before the operation. Until Christmas both these places had been certain "Finds;" they were about 2 or 3 miles apart and one flanked the other so that each had always been used as a reinforcing area for the other by the Afridis whenever we had visited either place. The nearer part of Alam Killi had been visited six times and every time but one had provided a fight. The country round both places had been carefully reconnoitred from a distance by day and, although the ground was again most difficult and broken, the night "round up" 1½ hours before dawn was most successfully carried out. In both instances one flank had to be carefully guarded and occupied during the night advance thus adding to the operation. Both villages were unfortunately drawn blank, but the enemy arrived during the destruction in some numbers and followed up the withdrawal over the deep nullahs down which they attacked our flank. Considerable skirmishing took place and we incurred some casualties.

Spintigga.

The Spintigga operation was the last and the biggest night operation carried out. Full details of this are given later. As it was situated 12½ miles away from the Brigade camp and in the midst of the big hills it was thought that a bag would be made; it is the home of the notorious Afridi leader Mullah Abdul Quddus and it was known to be occupied by men and also by families.

No secrecy precautions were neglected and the operation was an absolute surprise. But by this time the Afridis had learnt the night habits of the Brigade. Although the troops were camped so far away they had piquets out and into one of these on a hill 1,000 feet above the village the flanking column bumped an hour before dawn. Firing on both sides ensued and the alarm was given. Some dogs also were met with by the advanced guard near some unoccupied caves 3 miles from the nearest part of the village and these too gave the alarm.

Precautions taken.

For all these operations the following measures were adopted:—

(*a*) *Date of Operation.*—The date had to be carefully chosen with regard to the moon. These advances across big hills and huge nullahs would have been absolutely impossible without a good moon. On the other hand, it is impossible for anyone to make good shooting

with the rifle even with a full moon at 100 yards. The moon is particularly required in these operations just before dawn; they must therefore take place after full moon, but not too long after, otherwise it will rise too late. A week to 10 days after full moon was found the most suitable time. They can therefore only be carried out during 10 days of each calendar month.

(*b*) *Secrecy.*—Commanding Officers only were told of the scope of the operation three or four days before the date fixed. Company Commanders were told on the morning before the night operation, and all other officers and men only after Retreat before the night march.

The principal source of leakage of information is very often the Rearward Services and in Cantonments. Units taking part in operations can be trusted to keep silent—those behind do not realise the necessity and are apt to talk. Copies of Operation Orders were timed to reach other formations after the troops had started. Operation Instructions to the R. A. F. were sent in the form of a letter addressed personally to the Wing Commander concerned.

(*c*) *Deception.*—On occasions, bogus orders were issued for the day of the operation, and later cancelled. This proved most effective in stopping clerks of unit offices and outside formations and units talking.

The area of operations was carefully 'nursed,' no harassing fire or bombing being allowed for two or three weeks beforehand, while more attention was devoted to other areas.

Many additional fires were kept alight on the perimeter for several nights before the operation and in the camp generally with the ostensible object of keeping sentries and line guards warm, but in reality so that on the night itself the lights of troops preparing to move off would not be noticed as anything extraordinary.

(*d*) *Rate of March.*—Two miles an hour was allowed for the approach march across country, 2½ miles an hour along the new tracks. These rates of marching worked out satisfactorily.

(*e*) *Animals.*—The danger of mules braying cannot be risked. All noisy mules were left behind. No animals accompanied the leading columns, which in each case consisted of the troops detailed to surround the village and whose march was timed to enable this to be done an hour before dawn. Lewis guns were taken by these troops and manhandled anything up to six miles. A supporting column consisting of

Brigade Headquarters and a battalion followed in time to arrive within supporting distance at the same hour. All animals, mountain battery, machine guns, attached transport and Lewis gun mules marched in a column under Officer Commanding Mountain Battery, timed to join the supporting column at dawn.

Topography of the country traversed in the Spintigga Operation.

Spintigga is situated towards the eastern end of the Aka Khel Range, 1½ miles up a deep narrow valley where the range bifurcates eastward into two long spurs, the northern one (Spur 3230) finishing in the Mandai Gorge and the southern one (Spur 3475), in the Zao Plain, just south of the Gorge. These spurs rise 1,500 feet above the Aka Khel Plain. The village itself is a large one, consisting of several huts and many caves. It is built at the junction of two big nullahs and nestles under a high and very precipitous crag of sheer white rocks, from which it derives its name.

To reach Spintigga, the Column marched 6½ miles south from Jhansi Post where the greater part of the Brigade was encamped. At Nowshera Post, 1/1st Gurkha Rifles from Jula Talao and Nowshera Post joined the Advanced Column. From here the newly made track A 8 leads 2 miles south-west over a broken rising plateau to the northern entrance of the Mandai Gorge. This Gorge which is 2 miles long and runs generally north and south has broken hills on either flank culminating on the west in Spur 3230 and on the east in hill 2763. A mule track, probably made by us in 1855, winds through the Gorge, eventually debouching into the plain leading to Zao, 2½ miles further south. To reach Spintigga the troops had to turn off the track at the southern end of the Gorge and proceed 1½ miles westwards up the valley and the big spurs on either side.

Mandai village is a cave area which extends along the greater length of the Gorge. It had been kept under harassing fire from the Nowshera Post guns for some time and was believed to be unoccupied. West of the Gorge and north of Spur 3230 is a corridor of very broken country where lie the cave villages of Anzari Kandarai, Nawe Garhi and Alam Killi. In December 1930 and January 1931, these cave areas had been full of Afridi bands and it was hoped that they might still be occupied. One to 1½ miles east of the Mandai Gorge are the cave areas of Ganderi and Balkhor which had been unoccupied for some time.

Zao is a large cave area and an important junction of tracks and centre much used by gangs intent on raiding Peshawar District. It was frequently visited by Nowshera Brigade when encamped at Garhi Jani in January but had been left alone since then and, it was thought, had probably been partially re-occupied by Afridis. Two much used tracks lead west from Zao to the Mastura Valley. Along these tracks and in the Mastura Valley itself are many caves which all through the winter had contained many Afridis with their families.

Preliminary Preparations and Reconnaissances.

The operation against Spintigga was fixed for the night 10/11th March. On 7th March 1/1st Gurkha Rifles who had only recently arrived in the area, carried out a reconnaissance from Jula Talao and Nowshera Post as far west as hill 2763, from the top of which a fair view of the scene of operations could be obtained, though Spintigga itself and the greater part of the Spintigga Valley could not be seen. The other three battalions of the Brigade, *viz.*, 1/11th Sikhs, 2nd Frontier Force Rifles and 3rd Dogras had visited the Mandai Gorge on several occasions, but knew nothing of the Spintigga Valley. The reconnaissance of 1/1st Gurkha Rifles was therefore unlikely to attract attention.

Three strips of air photos of the valley and flanking spurs were obtained. Unfortunately they were taken on rather too large a scale and each strip had been photographed on different days. No indication of the white crags overlooking Spintigga was given by either air photos or map. Obliques, which might have been useful, were not available. Nevertheless these air photographs were of great value in locating the exact position of Spintigga. Commanding Officers only were informed on 6th March of the impending operation. No other officers were informed till 10th March and many had not even heard of the place until a few hours before the operation commenced.

Troops Available.

The troops available for the operation were :—

17th Light Battery.

One Machine Gun Platoon 2nd Essex Regiment.

1/11th Sikhs (less two rifle companies*) (Strength 200 O. Rs.).

2nd Frontier Force Rifles (less one rifle company*) (Strength 370 O. Rs.).

3rd Dogras ..(Strength 503 O. Rs.).

1/1st Gurkha Rifles (less machine gun company) (Strength 424 O. Rs.).

*In Bara Fort and permanent piquets.

General plan of operations.

The general plan of operation was for the approach march to be carried out in two columns, as follows :—

(*a*) *The Advanced Column*, consisting of—

1/11th Sikh (less two rifle companies and machine gun company.)

3rd Dogras (less machine gun company.)

1/1st Gurkha Rifles (less machine gun company.)

was to concentrate at Nowshera Post at 02-00 hrs. 11th March. Lewis gun mules only accompanied the Sikhs and Dogras to this point. Subsequently leaving all animals at Nowshera Post, the Column was to secure the Mandai Gorge and the two spurs flanking Spintigga by 06-30 hrs. (*i. e.*, half an hour before daylight). The roles allotted to each battalion were as follows :—

(*i*) 1/11th Sikhs were to act as Advance Guard throughout the passage of the Mandai Gorge, subsequently taking up a position about half mile south of the southern end of the Gorge to block the plain towards Zao.

(*ii*) 3*rd* Dogras were to piquet the route through the Gorge including the Hill 2763 but excluding the Spurs leading up to Pt. 3230.

(*iii*) 1/1st Gurkha Rifles were to form the main body of the Column as far as the southern end of the Gorge. The battalion was then to move west along Spurs 3230 and 3475 as far as Spintigga, dropping piquets as the advance proceeded. By 06-30 hrs. it was to be in position to command Spintigga and cut off the enemy retreat westwards from the village by close range fire. A special detachment was to be detailed to command Nawe Garhi by fire from Spur 3230.

(*b*) *The Supporting Column* was to leave Jhansi Post at 01-30 hrs. 11th March as follows :—

Local Advanced Guard—One Company 2nd Frontier Force Rifles.

Main Body (in order of march).

Brigade Headquarter and Signal Section.

2nd Frontier Force Rifles (less two companies and two platoons).

1st Line Tpt. Animals and Machine Gun Company 1/11th Sikhs.

Machine Gun Platoon 2nd Essex Regiment.

17th Light Battery.

2nd Field Ambulance.

1st Line Tpt. Animals and Machine Gun Company 3rd Dogras (to provide local Rearguard).

Right Flank Guard. Two Platoons 2nd Frontier Force Rifles moving about 50 yards clear of the Column and disposed along its length.

On arrival at Nowshera Post a demolition party from 4th Field Company Sappers and Miners, the 1st Line Tpt. Animals, 1/1st Gurkha Rifles and Lewis gun mules 1/11th Sikhs and 3rd Dogras were to join the Column.

Subsequently the Column was to move on through the Mandai Gorge and be in position at the southern end at 06-30 hrs. (*i. e.*, half an hour before daylight).

(*c*) *Action at Daybreak.*

At 07-00 hrs. 2nd Frontier Force Rifles (less one company) accompanied by the Demolition Party, 4th Field Company Sappers and Miners was to advance up the Spintigga Valley, secure the village in co-operation with 1/1st Gurkha Rifles and proceed with the destruction of all cave areas and property found.

Action of the Advanced Column.

The Advanced Column left Jhansi Post at 23-30 hrs. 10th March and reached Nowshera Post at 01-30 hrs. 11th March having covered the 6½ miles along a good all-weather track at over 3 miles per hour. 1/1st Gurkha Rifles concentrated at Nowshera Post at the same hour, and the whole Column, under the command of Officer Commanding 1/1st Gurkha Rifles moved on at 02-00 hrs.

The entrance to the Mandai Gorge was reached at 03-00 hrs. 1/11th Sikhs moving on through the Gorge as Advanced Guard, 3rd Dogras commenced piquetting the hills on both sides. While these piquets were moving out the barking of dogs was heard both from the direction of Gandheri and Mandai, and it appeared likely that the Afridis would be warned of our approach. Nothing, however, happened at this juncture.

The Officer Commanding 3rd Dogras divided his task into two company blocks, using two platoons of his third company to guard the entrances to Mandai Caves, and the remaining two platoons as his reserve. On the north and west sides of the Gorge, piquets had to cross the deep Star River bed. On the south and east sides, some difficulty was experienced in recognizing certain features, owing to the mule track hugging the hills where, in the dark, every small feature

close to the track resembled a mountain. Nevertheless the piquetting of the two miles of the Gorge, including climbing Hill 2763, was completed in 1½ hours and the Advanced Guard arrived in its position blocking the Zao Plain at 04-25 hrs. With the exception of one slight readjustment, all piquets were found at daybreak to be in their intended positions, an accomplishment which reflected great credit on all the Company and Piquet Commanders concerned. The position of piquets is shown on the Sketch Map B.

At 04-30 hrs., 1/1st Gurkha Rifles commenced the ascent of Spur 3230 with Headquarters and two companies while the remaining company moved off across the mouth of the Spintigga Valley to climb Spur 3475.

In the right column, one company was expended before Pt. 3230 was reached. The second company had just passed through when, at 06-00 hrs, its leading platoon was fired on at a range of 40 to 50 yards by an Afridi piquet of 6 or 7 men placed on Pt. 3230. The platoon advanced to a closer position and opened fire at 10 yards range killing one Afridi and mortally wounding another, while the remainder scattered and fled. Two rifles and a bandolier were captured. The Gurkhas suffered no casualties. The advance was continued under a certain amount of sniping and the position gained overlooking Spintigga by daybreak.

The left column (one company) had a few shots fired at it as it crossed the mouth of the valley, but, taking no notice, climbed Spur 3475 without incident. Afridis were found, however, in possession of Hill 3440, but were quickly driven off, the hill being gained just as daylight broke.

Good Lewis gun targets were obtained from both spurs at daylight as the Afridis hurriedly left Spintigga Village in a westerly direction. Securing these two very big and quite unknown features in the dark was a very fine accomplishment on the part of 1/1st Gurkha Rifles. Their dispositions are shown in detail on the attached Sketch Map B.

Action of the Supporting Column.

The supporting Column left Jhansi Post at 12-00 hrs. and reached Nowshera Post at 04-00 hrs. Picking up the demolition party of Sappers and Miners and animals of the Advanced Column, the march was resumed at 04-30 hrs., and the entrance to the Mandai Gorge

reached at 05-35 hrs. At 05-45 hrs. the Column halted near the Knoll and was ordered to wait there till dawn in order to ensure that surprise was not lost. At 06-00 hrs. however, firing on Spur 3230 was heard. It was obvious that surprise was no longer possible and there was no point in waiting any longer. The column accordingly, was ordered to move on to the southern end of the Gorge, which it reached just before daybreak.

At daybreak, 2nd Frontier Force Rifles moved rapidly up the Spintigga Valley. A few shots were fired from the high white cliff as the Advanced Guard approached the village, which was quickly occupied and piquets put out on the surrounding foot hills.

The demolition party of Sappers and Miners and one company commenced work on the destruction of the village and property at 08-30 hrs. and completed it at 09-30 hrs. One Afridi who was discovered hiding in a cave under a pile of brushwood, from which he attempted to snipe any British Officer seen, had eventually to be bombed out. Continuous sniping went on throughout this period but was kept under subjection by Lewis gun and machine gun fire. 1/1st Gurkha Rifles were continually engaged with small parties of Afridis on the spurs west of spintigga and at 09-15 hrs. both 1/1st Gurkha Rifles and the Close Reconnaissance Aeroplane reported a party of 40 Afridis advancing down the Khangi Khwar (south of Spur 3475).

The Withdrawal.

Before the withdrawal, 1/1st Gurkha Rifles on the southern spur asked for an artillery concentration on the hill beyond their furthest piquets where the Afridis were concentrating. This was given, and the withdrawal commenced at 10-00 hrs. 2nd Frontier Force Rifles evacuated Spintigga and the valley by 11-20 hrs., 1/1st Gurkha Rifles retiring in conformity as far east as Points 3230 and 3475. Leaving one Company, 2nd Frontier Force Rifles then passed through 1/11th Sikhs into Brigade Reserve at the Knoll. The Afridis followed up the company 1/1st Gurkha Rifles on Spur 3475 at a respectful distance but made no attempt to follow up 2nd Frontier Force Rifles or 1/1st Gurkha Rifles on Spur 3230.

1/11th Sikhs now took over the duties of Rearguard, with one Company Frontier Force Rifles under their command and supported by 17th Light Battery and Machine Gun Platoon 2nd Essex Regiment.

The first task was to cover the retirement of the Gurkha company off Spur 3475 where they were engaged with several small parties of Afridis. Thanks to the excellent facilities for covering fire from machine guns and 3·7 howitzers this was accomplished without difficulty by 11-55 hrs. After 1/1st Gurkha Rifles had withdrawn from the big Spur 3475, large numbers of Afridis were seen doubling eastward along the sky-line. They were those who had been reported by the air and 1/1st Gurkha Rifles during the morning in the Khangi Khwar. They were just too late.

The withdrawal down the Mandai Gorge now commenced. Spur 3230 and Hill 2763 were rapidly evacuated by 12-15 hrs. 2nd Frontier Force Rifles were sent on to take up a position on the plateau north-east of the entrance to the Gorge to cover the final retirement, while 1/1st Gurkha Rifles were ordered to take up a position along the Star River, protecting the west flank of the Brigade during its retirement to Nowshera Post. The evacuation of the Mandai Gorge was accomplished at great speed without interference from the enemy, the last troops clearing the Gorge by 12-35 hrs. Machine guns 3rd Dogras obtained good long range targets at 2,200 yards at a party of Afridis on Spur 3230.

The Column, covered by 2nd Frontier Force Rifles and 1/1st Gurkha Rifles, then withdrew to Nowshera Post which was reached at 13-00 hrs. and where a long halt was taken for hot meals, which had been specially sent out from Jhansi Post for the troops. At 15-00 hrs. the march was resumed to Jhansi Post which was reached by the tail of the Column at 17-15 hrs.

The maximum distance covered by any one unit was 26 miles and the maximum length of time out was 18 hours. The Brigade suffered no casualties. It is impossible to estimate how many were inflicted on the enemy, but six Afridis were actually killed or captured and it is probable that they suffered many more casualties from machine gun, Lewis gun and artillery fire during the occupation, and first stage of the withdrawal from Spintigga.

Some Lessons Brought out by this Operation.

In addition to the points mentioned under 'Precautions taken' the following were well-illustrated.

(*a*) The importance of using artillery screens in hill warfare. They can be easily sited so as to give vital information

to our own automatics and guns without disclosing piquet positions to the enemy. In one case this was not done and very nearly led to a platoon being wiped out by machine gun and artillery fire.

(*b*) The importance of training Piquet Commanders to the change in piquetting withdrawal tactics which has been brought about by the increase in Vickers guns. It is now rarely, if ever, necessary for a piquet to withdraw by bounds, arranging for the covering of its own withdrawal. This was done on one occasion and resulted in a delay in the withdrawal of 20 minutes at a critical moment.

(*c*) 17th Light Battery engaged every target seen and carried out infantry clock code shoots with good effect, but the operation was too big for one battery to tackle. It is useful to determine the correct proportion of artillery to an Infantry Brigade. 17th Light Battery in this operation had to attempt to cover 4 miles of piquets, including a sharp change of direction, and watch a large number of main approaches which the Afridis might have used. The difficulties were accentuated by the narrowness of the valleys and the steepness and height of the hills. 17th Light Battery had, in fact, an impossible task, which might have to lead to serious consequences if the Afridis had shown more enterprise. The need for an additional battery was clearly indicated, and was confirmed in other operations. The correct proportion of artillery to infantry in mountain warfare is two batteries to each Infantry Brigade.

Possibility of Delay.

The destruction of Spintigga was a large and complicated night and day operation well carried out by all troops engaged, and the possibility had been foreseen that, if heavy fighting occurred, the Brigade would have to bivouac for the night either in the Mandai Gorge or at Nowshera Post. The night's rations could then easily have been obtained even at a late hour from Jhansi Post or Bara Fort by M. T. over the newly made tracks.

II. The Action in the Gandao Kotal—18*th March* 1931.

Reference :—Map C. Sketch Map of Khajuri Plain.
Map D. Sketch Map of Gandao Kotal.

During the autumn of 1930 when the 9th (Jhansi) Infantry Brigade was encamped at Miri Khel Camp, the Gandao Pass over which is the main route from the Khajuri Plain into the Bara valley and Tirah, was visited three times. On these occasions, the advance was never carried out more than half a mile beyond the Kotal itself, opposition was never met and no casualties were incurred. The Afridis, who were in some numbers south of the Bara River and further north round the Shinkamar Pass and Tauda China, did not seem to take any notice of our troops on this route.

The 9th (Jhansi) Infantry Brigade left Khajuri Force early in January 1931, and three battalions of Nowshera Brigade were moved up from the southern end of the Aka Khel Plain to Jhansi Post which to a certain degree faced the eastern entrance to the Gandao Kotal and is about three miles from it. On 9th March 1931, 2nd (Rawalpindi) Infantry Brigade left Karawal Camp in the centre of the Khajuri Plain for its peace station. Nowshera Brigade (less one battalion) at Jhansi Post and 1/3rd Gurkha Rifles at Fort Salop were the only troops left north of Bara River.

Object of the Operation of 18th March 1931.

The Nowshera Brigade itself was due to leave the Khajuri and Aka Khel Plains on 24th March, when only two battalions, 1/1st Gurkha Rifles and 1/3rd Gurkha Rifles forming the peace garrison, would be left.

The *Id* was over, and the general offensive, which the Afridis had so long boasted they would make after that festival, was long over due. It was thought that, since the Khajuri Force had been now reduced to one-third its former strength, they really might do something. They had been reported to be occupying the caves in the Gandao Pass and to have observation posts on the Kotal itself. A few had been encountered on 14th March at Dora a cave village 2½ miles north-east of the Pass. Considerable numbers of Afridis were known to be in the villages in the Bara and Mastura valleys near the junction of those two rivers, two miles beyond the Kotal. With few troops left and these shortly to be still further reduced, it was desirable to show the offensive and to impress the Afridis with our ability to go anywhere, inside the operational area (see Map C). It was also advisable that some of the troops who had recently arrived to form the peace garrison of the Plain should know the country as far forward as possible.

It was therefore decided that Nowshera Brigade (less one battalion) from Jhansi Post and the battalion from Fort Salop (1/3rd Gurkha Rifles) should carry out a reconnaissance of the Gandao Pass, proceeding as far west up to the extreme limit of the operational area as the Brigade Commander might decide on reaching the Kotal.

Distances.

Jhansi Post Camp to eastern entrance to Pass—3 miles (open plain intersected with nullahs).

Eastern entrance to Pass to Kotal	.. $1\frac{3}{4}$ miles.
Kotal to final objective	.. 1 mile.
Total to be piquetted	.. $2\frac{3}{4}$ miles.

Topography of the Gandao Pass.

The new main road from Bara runs to within 1,000 yards of the eastern entrance to the Pass. Thence the old track made by our troops in 1897 continues over the Kotal and down to Mamanai. Some repairs were carried out to this track by the Jhansi Brigade and it is now in remarkably good condition and fit for light M. T. for most of its length.

The eastern entrance to the Pass is marked by two distinct features, Jat Ridge (Pt. 2770) 1,000 yards to the north of the track, a large feature rising 600 feet relative to the plain, and Punjab Hill, a smaller but upstanding hill about 400 yards south of the track rising about 400 feet relative to the plain. A few hundred yards from the eastern entrance the track drops into a dry nullah bed about 30 feet broad which forms a well defiladed route for a column, but has the disadvantage that it is impossible to see what is going on from it. The track continues along this nullah bed for about 1,000 yards and then climbs out on to the south bank and ascends by an easy gradient with one or two sharp turns about another 1,500 yards to the Kotal. After passing Punjab Hill, the country becomes a tangled mass of big and small hills with no regular conformation, fairly thickly covered in scrub, with nullahs running in all directions—most difficult ground, ideal for Afridi tactics. After the track leaves the nullah bed, it is bounded on both sides by a series of steep rocky heights which narrow to within close rifle range from each other above the Kotal. The heights to the south of the track are rocky outcrops on a sharp ridge which culminates, at the Kotal, in a big precipitous feature with three distinct peaks 600 feet above the Kotal. Those to the north of the

track are broken and irregular, leading up to a single main ridge overlooking the Kotal and 400 feet above it.

The Kotal forms a vantage point from which a splendid general view of the country to the right (north-west) of the track is obtainable.

The ground on this flank consists of three big main Spurs leading down from the Pakhar Ghar Range, with many isolated hillocks and nullahs in between. The furthest of these main spurs, known as Grey Spur, coincided with the limit of the operational area and was the Brigade objective on the right (north-west) side of the track. Owing to the big three peaked hill, nothing can be seen from the Kotal of the country to the south-east of the track, except a whale-backed grey ridge (Whale Back), 1,500 yards south-west of the Kotal. This also lies on the operational limit and was the Brigade objective on the left (south-east) side of the track. In between these two features, the country is an intricate mass of broken ridges and nullahs running into the Bara River just east of its junction with the Mastura. Grey Spur and Whale Back are within 1,200 yards of Mamanai and offer an almost uninterrupted view of the Bara valley between Mamanai and Sawaikot.

It is impossible to indicate on Map D. the broken and intricate nature of the country through the Gandao Pass. Main features and main nullahs only can be shown.

Troops available.

The troops available for the operation were :—

One squadron Poona Horse.
One section 1st Armoured Car Company.
17th Light Battery.
Machine Gun Platoon 2nd Essex Regiment.
1/11th Sikhs (less two platoons) (strength 400 O. R's).
3rd Dogras (less two platoons) (strength 445 O. R's).
2nd Frontier Force Rifles (strength 500 O. R's).
1/3rd Gurkha Rifles (less one company and one section machine guns) (strength 345 O. R's).
2nd Field Ambulance.

General Plan.

The general plan for the operation was for the main Column from Jhansi Post and 1/3rd Gurkha Rifles from Fort Salop to concentrate on the main road about one mile from the eastern entrance to the Pass,

covered by one squadron Poona Horse and the Armoured Cars. The Column was then to enter the Pass, the Cavalry remaining to watch both flanks of the entrance, towards Dora on the north and the Ant Heap on the south, while one sub—section Armoured Cars patrolled to Wucha Garhi on the north and the other sub-section to Miri Khel Camp site on the south. As there were four battalions available, and the distance to be piquetted was very short ($2\frac{3}{4}$ miles), and as the ground was known to a certain extent, and the return was by the same route, it was decided to employ the Battalion Block system in piquetting the Pass. Some remarks on this system in its relation to the modern organization of an infantry battalion are given later.

The Advance.

(*a*) The two Columns concentrated at 08-30 hrs. During the short halt of a few minutes which ensued, one section 17th Light Battery came into action to cover the advance as far as the Kotal. The Column then entered the Pass at 08-45 hrs. in the following order :—

2nd Frontier Force Rifles, finding own advance guard and piquetting troops for 1st Block.
Machine Gun Platoon 2nd Essex Regiment.
Brigade Headquarters and Signal Section.
One section 2nd Field Ambulance.
1/3rd Gurkha Rifles.
One Section 17th Light Battery.
1/11th Sikhs.
One section 2nd Field Ambulance.
3rd Dogras.

(*b*) 1st *Block.*

2nd Frontier Force Rifles quickly seized Punjab Hill and Jat Ridge, placing one platoon on each. Advancing another 1,200 yards, 5 more piquets were put out without opposition as shown on Map D. These seven piquets absorbed 6 platoons, which together with company reserve used up two companies. The third rifle company hitherto used as Advanced Guard came into Battalion reserve. The Machine Gun Company was disposed to support road piquets, with one section in Battalion reserve. The Machine Gun Platoon 2nd Essex Regiment advanced with the battalion in close support, but was not used in the Block.

(*c*) *2nd Block.*

At 09-20 hrs. 1/3rd Gurkha Rifles passed through 2nd Frontier Force Rifles. As this battalion had only two rifle companies available, it used one platoon only as Advanced Guard. In a further advance of 1,100 yards up to and including the Kotal, eight piquets were put out absorbing a total of 5½ platoons, Machine Gun Platoon. 2nd Essex Regiment assisted the battalion machine guns in covering some of these piquets into position.

The Kotal was seized without opposition at 10-10 hrs. Commanding Officers of rear battalions joined the Brigade Commander who decided to advance up to the limit of the operational area and issued orders accordingly. The short halt was made use of by 17th Light Battery to put its second section into action on the Kotal.

(*d*) *3rd Block.*

At 10-40 hrs. 1/11th Sikhs passed through 1/3rd Gurkha Rifles and continued the advance a further 1,500 yards, putting out 7 piquets, absorbing a total of 6 platoons. The last platoon was used in taking Grey Spur, the final objective on the right (north-west) of the track, which was reached by 11-10 hrs.

(*e*) *4th Block.*

This block was in reality an extension of the 3rd Block. The Advanced Guard Company of 1/11th Sikhs remaining in position as such astride the track, 3rd Dogras were ordered to reinforce and take over the final objective. They despatched—

(*i*) One company to secure Whale Back.

(*ii*) One company less two platoons to strengthen the Sikh platoon on Grey Spur.

(*iii*) One company less two platoons to watch two important nullahs north of Grey Spur.

(*iv*) Two platoons were retained in battalion reserve.

Whale Back, the final objective on the left (south-east) of the track, was secured at 11-25 hours.

(*f*) The advance through the Pass to within ¾ of a mile of Mamanai, a total distance of 4,600 yards (2¾ miles) had taken 2 hours 40 minutes and had absorbed the equivalent of 3½ battalions on the Battalion Block System.

The Halt.

During the advance no Afridis had been seen and not a single shot fired, until the capture of Grey Spur and Whale Back, when large

numbers of Afridis were seen in the Bara valley towards Sawaikot and Mamanai and some fire was opened on the Dogras as they took Whale Back. The appearance of our troops on these two features in full view of their villages, families and cattle was too much for the Afridis. Evidently fearing we were coming on, they beat their war drums, drove away their women and cattle and turned out in considerable numbers. War drums were also heard in the direction of the Shamsa Nala and shortly afterwards the Dogras on Whale Back were being fired into at long range from their left rear.

At about 12-00 hrs., parties of the enemy were seen advancing from the direction of Sawaikot but, as they were outside the operational area, fire was not opened on them. The enemy also attempted to work round the Dogras left and up the Shamsa Nala and were engaged with machine gun, Lewis gun and rifle fire at ranges varying from 800 to 1,700 yards with considerable effect. One such party was engaged at 1,500 yards range by the Essex and Dogra machine guns; several Afridis were seen to fall and the remainder disappeared in disorder. The casualties of this party of Aka Khel were afterwards reported by informers to have been ten. The Dogras suffered two casualties during this stage. In the meantime, 17th Light Battery, the whole of which was now in action at the Kotal, engaged some small parties who were attempting to work round the right flank of the Sikhs.

The Withdrawal.

(*a*) *4th and 3rd Blocks.*

The withdrawal commenced at 12-30 hrs. The Dogra company evacuated Whale Back at high speed, the Dogra platoon on Grey Spur conforming and evacuating one casualty. The Sikh platoon on Grey Spur, after withdrawing one-third of the way down, was observed to halt and then re-occupy the spur. It was thought at first that the platoon had suffered a casualty, but it subsequently transpired that the Piquet Signaller, who was necessarily working single—handed, had intercepted a message " Wait a bit " intended for the Vanguard. The danger of a mixed detachment of two units on Grey Spur had been foreseen and special orders had been issued by the Brigade Commander that this detachment was under the command of the 3rd Dogras, who were to detail a British Officer to take command. This officer however was at the time with the supporting platoon and was not therefore in a position to deal with the mistake immediately.

This unfortunate occurrence, which delayed the retirement for fourteen minutes, allowed the Afridis to close up, and led to the comparatively stiff fighting which ensued for the next four hours. Locally it might have had serious consequences, had not the enemy's pressure from the left flank been dealt with by supporting Lewis guns in positions close to the track.

Throughout the subsequent withdrawal, the Sikh piquets on the right (north-west) flank were not pressed, but their piquets on their left flank were all closely engaged, and, subsequent to the withdrawal of No. 5 piquet on that flank, pressure on the Rear Guard was exerted. The value of supports on the hillocks close to the track was considerable. At one time it became necessary to put Battalion and Company Headquarter 1/11th Sikhs (runners, signallers and stretcher bearers) into the fight to prevent the retirement of a far flung piquet being cut off. The Afridi in this area was not content with the occupation of the high features and utilised to the full the several covered approaches converging upon the tracks.

Machine guns in this area had less scope during the retirement than has usually fallen to their lot owing to the intricacy of the scrub covered terrain. From the Kotal, however, they obtained good targets, dispersing parties of Afridis advancing up the track, very materially relieved the pressure on the Sikh Rearguard by silencing enemy who rapidly occupied the south-west peak of Three Peak Hill on the withdrawal of the piquet in that area.

17th Light Battery in action on the Kotal carried out very effective fire on to each position as the enemy occupied it on our withdrawal. At 12-45 hrs. one section was sent back to its former position at the eastern entrance to the Pass. The other section meanwhile, continued to obtain excellent targets on Grey Spur and Whale Back and along the track in that neighbourhood, all of which were heavily shelled.

The 3rd Block was evacuated by 13-40 hrs., the Sikhs suffering one casualty and 17th Light Battery one officer wounded (at his O. P.) during the final withdrawal over the Kotal. 3rd Dogras who had been initially drawn into Brigade reserve on the Kotal were sent on at 13-15 hrs. to a position on the plain clear of the entrance to the Pass. Two companies 1/11th Sikhs were brought into Brigade Reserve about midway between the Kotal and the entrance to the Pass, the remainder of the battalion being sent on to the entrance. The forward section

17th Light Battery withdrew just as the evacuation of the block was completed, to join the other section at the entrance to the Pass.

(*b*) *2nd Block.*

When the rear guard flag was handed to the Gurkhas, many small parties of Afridis were pressing the retirement from the south and south-west. The rear guard and Gurkha piquets 6, 7 and 8 were all heavily engaged with enemy working their way up the track and to the south of it. The enemy varied from organized uniformed parties to parties containing villagers with axes. Some standards were seen.

The withdrawal from the Kotal commenced at 13-40 hrs. Piquets 8, 7, 6, 5 and 4 (*i.e.*, one company block) were rapidly and very skilfully evacuated by 13-55 hrs. As soon as the Kotal was cleared, a large body of Afridis with drums, tried to cross it with a rush but was driven back by machine gun fire. Small parties, however, continued to follow up the rear guard closely down the track and nullah from the Kotal to within bombing range, while others worked down the ridges on either side of the nullah against piquets 1 and 3. Owing to the broken nature of the ground, these parties were difficult to observe until they were close up to a piquet. The main pressure continued on the south side of the road and Nos. 2 and 3 piquets became engaged with parties who had worked round the southern flank. Several casualties were inflicted and in one case attempts on the part of the Gurkhas to secure Afridi rifles were prevented by covering fire from other Afridis in the vicinity, so closely was the withdrawal followed up. No. 3 piquet was evacuated at 14-00 hrs. and the end of the Gurkha block almost reached, when events further in rear in the 1st Block necessitated a halt.

(*c*) *1st Block.*

The advanced echelon of Brigade Headquarters retired from the Kotal at 13-25 hrs. just ahead of the last section of 17th Light Battery and by 13-40 hrs. had joined the rear echelon on a low ridge above and immediately north of the main nullah about (A), in about the centre of the 1st (2nd Frontier Force Rifles) Block. Ten minutes later, while the tail of the battery was passing along the nullah, both the ridge and the nullah bed suddenly came under heavy fire from the south. One B. O. R. 17th Light Battery was killed, another wounded, and communication from the ridge became impossible. The cause of the trouble was quickly spotted to come from a razor

backed hill about 250 yards long and about 800 yards south of the main track on which 2nd Frontier Force Rifles had placed their No. 6 piquet. The piquet commander had divided his piquet, placing two rifle sections at the south-west end of the hill and keeping the Lewis gun section and one rifle section at the north-east end. The sides of the hill are precipitous, much indented by the heads of small nullahs, and in places covered with scrub. A party of about 50 to 60 Afridis had rushed the two rifle sections off the south-west end of the hill, and could be seen on the crest standing up and firing down at the sepoys below them. Unfortunately, at this moment, the Lewis gun at the north-east end of the hill jammed and for a few moments sufficient fire could not be developed to check the Afridis. The precarious position of the piquet was, however, quickly noticed by F. O. O's. and supporting troops and such heavy artillery fire and machine gun fire from the Essex and 2nd Frontier Force Rifles machine guns brought to bear that the Afridis could not advance from the south-west end of the hill. Taking advantage of this, the piquet, very well led by its commander, counter-attacked. The commander of the company finding the piquet immediately took his reserve (one platoon) to assist. Officer Commanding 2nd Frontier Force Rifles requested Officer Commanding 1/3rd Gurkha Rifles to stop his withdrawal, so as to allow him to use his reserve company to counter-attack. This company had already been disposed to take over rear guard duties from the Gurkhas, and in consequence took half an hour to develop its counter-attack.

The position of the Gurkhas, right under the Kotal and fired into from west and south was now rather a precarious one. Nos. 1 and 2 piquets were, however, ordered to hold on and the rear guard took up a position astride the nullah. Continually pressed from west and south, extra ammunition had to be sent up to the Lewis gun of No. 1 piquet, while both the rear guard and No. 2 piquet had to resort to bombing to clear the main nullah and a subsidiary one, of Afridis who had crept up unseen. Meanwhile the lost piquet position was being rapidly regained by the original piquet reinforced by the company reserve. The reserve company only arrived just as the hill had been regained. So heavy had been the artillery, machine gun, Lewis gun and rifle fire of supporting troops, including the Gurkha No. 2 piquet who gave very material assistance, that the Afridis had no

time to secure the rifles of two of our dead below the south-west end of the hill and left four of their own dead with their rifles on the hill.

By 15-00 hrs. all casualties had been evacuated, 1/3rd Gurkha Rifles recommenced their withdrawal and by 15-30 hrs. had passed through 2nd Frontier Force Rifles. Under Brigade Orders one company 1/11th Sikhs took up a position on a low ridge and astride the track between Jat Ridge and Punjab Hill to cover the retirement of 2nd Frontier Force Rifles, while two platoons Sikhs were sent up to Jat Ridge, a very big feature, to reinforce the 2nd Frontier Force Rifles piquet there. This hill appeared from the entrance to the Pass to be a single peak; seen from half way up the Pass it consisted of three distinct peaks 100 yards apart.

The withdrawal from the Pass continued methodically. Large numbers of Afridis were now following up at a respectful distance both north and south of the track and firing was continuous on both sides. The main pressure continued to be south of the track where the Afridis were constantly trying to work round our flank. They were eventually stopped by the piquet on Punjab Hill, who were much assisted by a Lewis gun of 17th Light Battery which was posted with the F. O. O. on this hill. Towards the end of the withdrawal, the machine guns of armoured cars and cavalry south of the track came into action at long range and materially assisted in checking the Afridi outflanking movements.

At 16-30 hrs. 1/3rd Gurkha Rifles were sent back to Fort Salop. 3rd Dogras, who had been in reserve on the plain, covered the final retirement of 1/11th Sikhs and 2nd Frontier Force Rifles out of the hills, and, with cavalry and armoured cars watching the flanks, troops returned to camp, which was reached at 18-00 hrs.

Ammunition Expenditure.

17th Light Battery	..	283 rounds H. E.
		120 rounds shrapnel.
Machine Gun Platoon 2nd Essex	..	8,700 rounds S. A. A.
1/11th Sikhs	..	6,100 ,, ,,
3rd Dogras	..	5,031 ,, ,,
1/3rd Gurkha Rifles	..	5,250 ,, ,,
2nd Frontier Force Rifles	..	19,268 ,, ,,
Squadron Poona Horse	..	359 ,, ,,

Casualties.

Our casualties were :—

(*a*) *Killed.*

One B. O. R.	.. 17th Light Battery.
Two I. O. R's.	.. 2nd Frontier Force Rifles.
One G. O. R.	.. 1/3rd Gurkha Rifles.

(*b*) *Wounded.*

One B. O.	.. 17th Light Battery.
One B. O. R.	
One I. O. R.	.. 2nd Frontier Force Rifles.
One I. O. R.	.. 1/11th Sikhs.
Three I. O. R's.	.. 3rd Dogras.

It is very difficult to give anything approaching an accurate estimate of enemy casualties. After careful sifting of reports from units and informers, a conservative estimate of enemy dead or died of wounds was 28. It is probable that there were many more, quite apart from the wounded. Close Reconnaisance aeroplanes reported on the following day seeing numbers of Afridis on the hills near the Kotal evidently looking for missing ones and other groups near the villages engaged in funeral rites.

Lessons brought out by this operation.

(*a*) *The Battalion Block System* worked very well in the particular conditions of this operation. It is obviously uneconomical in troops since each Battalion has to keep in hand a definite reserve to use as advanced guard and as rear guard in the withdrawal. Normally with the four rifle company organization one used to reckon on a battalion piquetting three miles of the route. On the other hand, the Battalion Block System is the best way of obtaining full value out of all the machine guns in a mountain warfare piquetting operation. Each machine gun company supports its own battalion block. In the through Advance guard and Rear guard System many machine guns cannot be utilised.

The machine gun platoon 2nd Essex Regiment supported each battalion in turn throughout the advance and withdrawal. The necessity for some of the battalion machine guns to be well forward to support the first piquets up was well illustrated. One echelon should be immediately behind the advanced guard so that it can drop into

position to support the piquets of the leading company. This was not done in one case and caused some delay and a block in the road while the machine guns were brought forward.

(*b*) *Artillery.*

The support given by the 17th Light Battery was invaluable. This operation, however, once again confirmed that the right proportion of guns to infantry in mountain warfare is two batteries to a brigade. During the withdrawal 17th Light Battery practically did not cease firing and by the end had consumed all its H. E. and the greater part of its shrapnel. An additional battery was badly needed.

(*c*) *Position of Reserves.*

As each battalion concluded its withdrawal it came into Brigade Reserve. It is essential that it should not then block the road for a rapid retirement. It was found, however, especially when the fighting in the 1st Block started, that the Brigade Reserve had passed too far through and was not at hand. This is a common error and requires considerable judgment to obviate.

(*d*) *Piquets.*

This operation brought out many lessons as to the degree and extent to which piquetting is necessary. There is a tendency in peace training to make piquets too weak and post them too close in. In difficult country such as this, no piquet should be less than two sections strong (*i.e.*, not less than 12 rifles). No. 6 piquet, 2nd Frontier Force Rifles consisted of one platoon (23 rifles). The hill they held was an isolated ridge 250 yards long with much dead ground behind it, and was commanded by high ground beyond it. It is considered that one platoon was too weak for this piquet. Later it was found necessary to strengthen Jat Ridge piquet. Piquets must be far enough out adequately to protect the road and in very broken country supports must be put out.

Automatic Weapons.

The limitations of automatics in denying ground by fire were well illustrated. Bold unbroken features, bare hill tops and naked ridges can be denied by the fire of guns and machine guns. Broken scrub covered country must be almost as liberally piquetted by riflemen as before the increase in automatics. On the other hand, the Afridi has throughout shown a great respect for the Lewis gun and no Company Commander with actual experience would contemplate with anything

but alarm, a reduction in the number of light automatics in the rifle company.

(*e*) *Signallers.*

The necessity for leaving signallers with piquets was well demonstrated. To enable messages to be recorded accurately they should be in pairs, but the present establishment of signallers in the battalion does not permit of this being carried out. Most of the Battalion Commanders in the Brigade are averse from the use of semaphore, in which proficiency is more difficult to maintain and exposure greater. In consequence, company signallers are now being trained in Morse at the scale of two signallers per platoon.

Some Comments.

The operation which had been planned was successfully carried out. All arms and units of the Brigade co-operated in mutual support to a marked degree with the minimum of orders from the Brigade. Although Brigade Headquarter was well up throughout the operation, only on eight occasions was it necessary to give any orders to units. The advance was rapidly carried out; the withdrawal was steady and continuous, except for the two incidents noted. Such incidents must always be expected and consequently in a mountain warfare operation it is essential always to allow for such delays and to allow plenty of time.

The route through the Pass was more thickly piquetted than will usually be possible on the march. The Brigade consisted of four rather weak battalions and piquetted two and a three-quarter miles. The large number of troops used up was due to—

(*a*) The extremely intricate country.

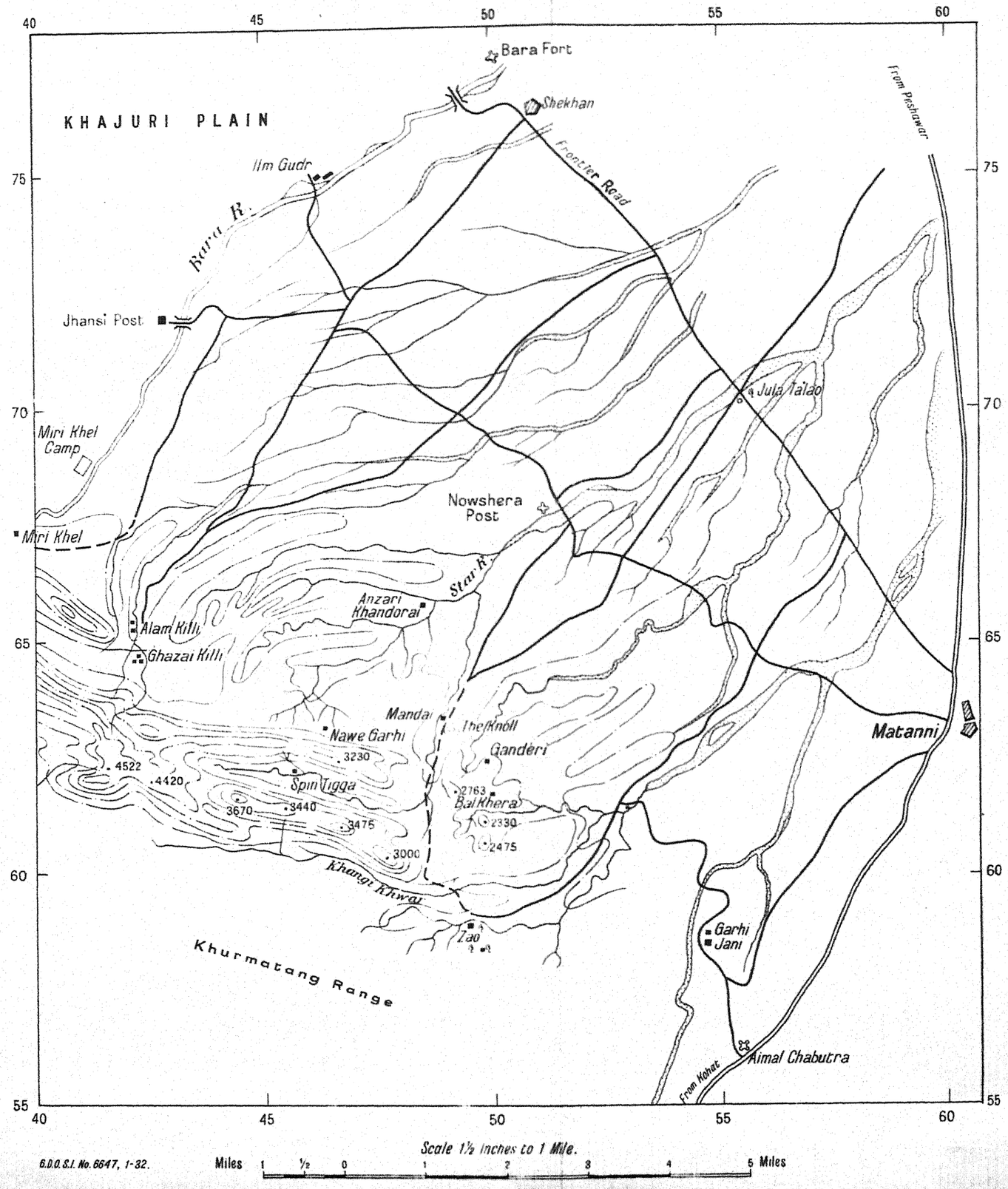
(*b*) The very big country towards and on the final objective.

(*c*) The fact that there were four battalions available. The final objective was in reality held very strongly as a defensive position by the fourth battalion, which, for the remainder of the day, was superfluous.

In a 'through' march, the necessary piquetting could have been carried out with two and a half battalions.

SKETCH OF ROADS & TRACKS SOUTH OF BARA RIVER N. W. F. 1930-31.

Map A



Scale 1½ inches to 1 Mile.

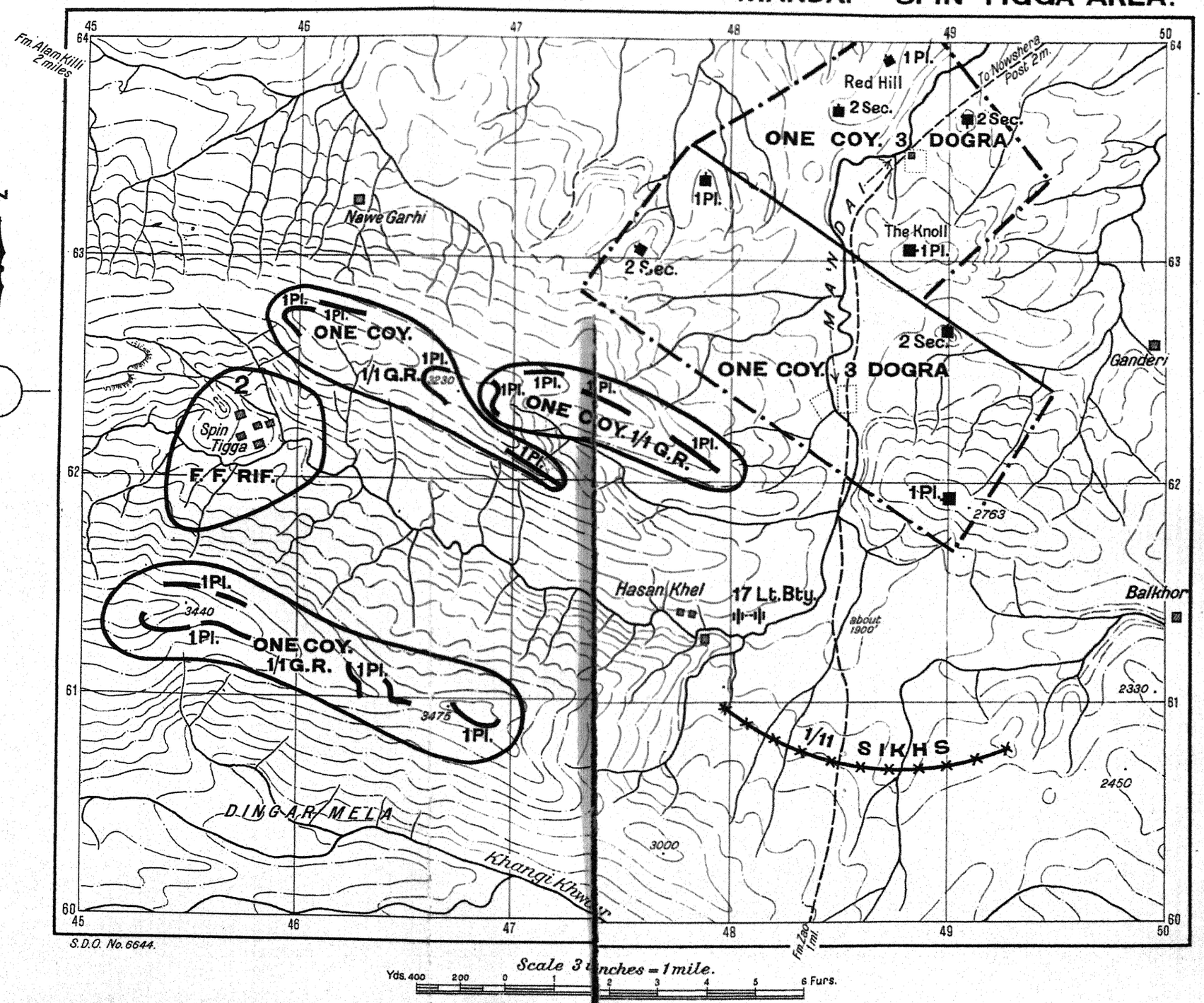
Miles 1 ½ 0 1 2 3 4 5 Miles

G.D.O.S.I. No. 6647, 1-32.

MAP B.

ENLARGEMENT OF PORTION OF MAP 38 8/5.

MANDAI — SPIN TIGGA AREA.



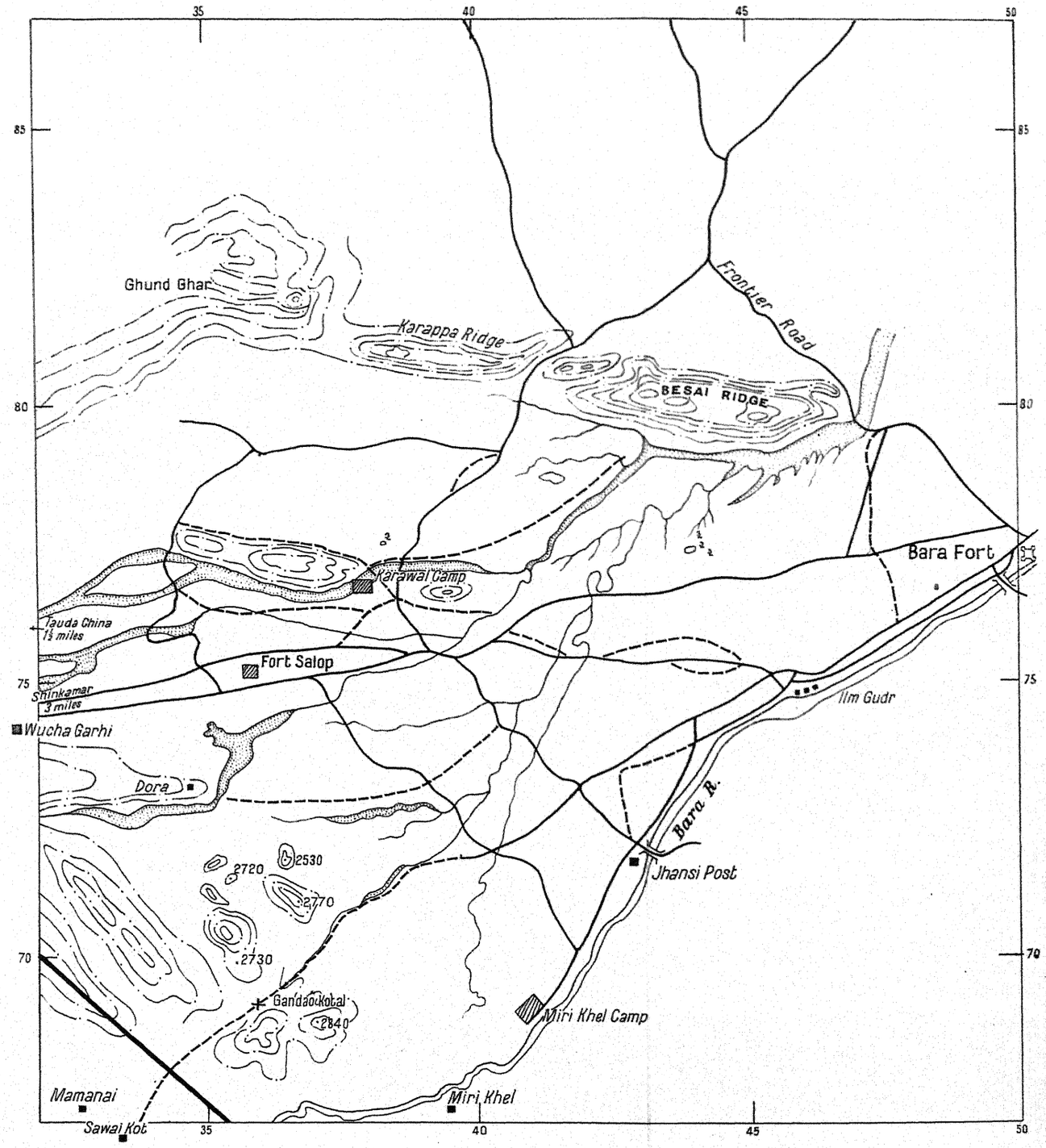
S.D.O. No. 6644.

Scale 3 inches = 1 mile.

Yds. 400 200 0 1 2 3 4 5 6 Furs.

MAP C.

SKETCH MAP OF THE KHAJURI PLAIN. N.W.F.
1930-31.



Scale 1 Inch to 1½ Miles.

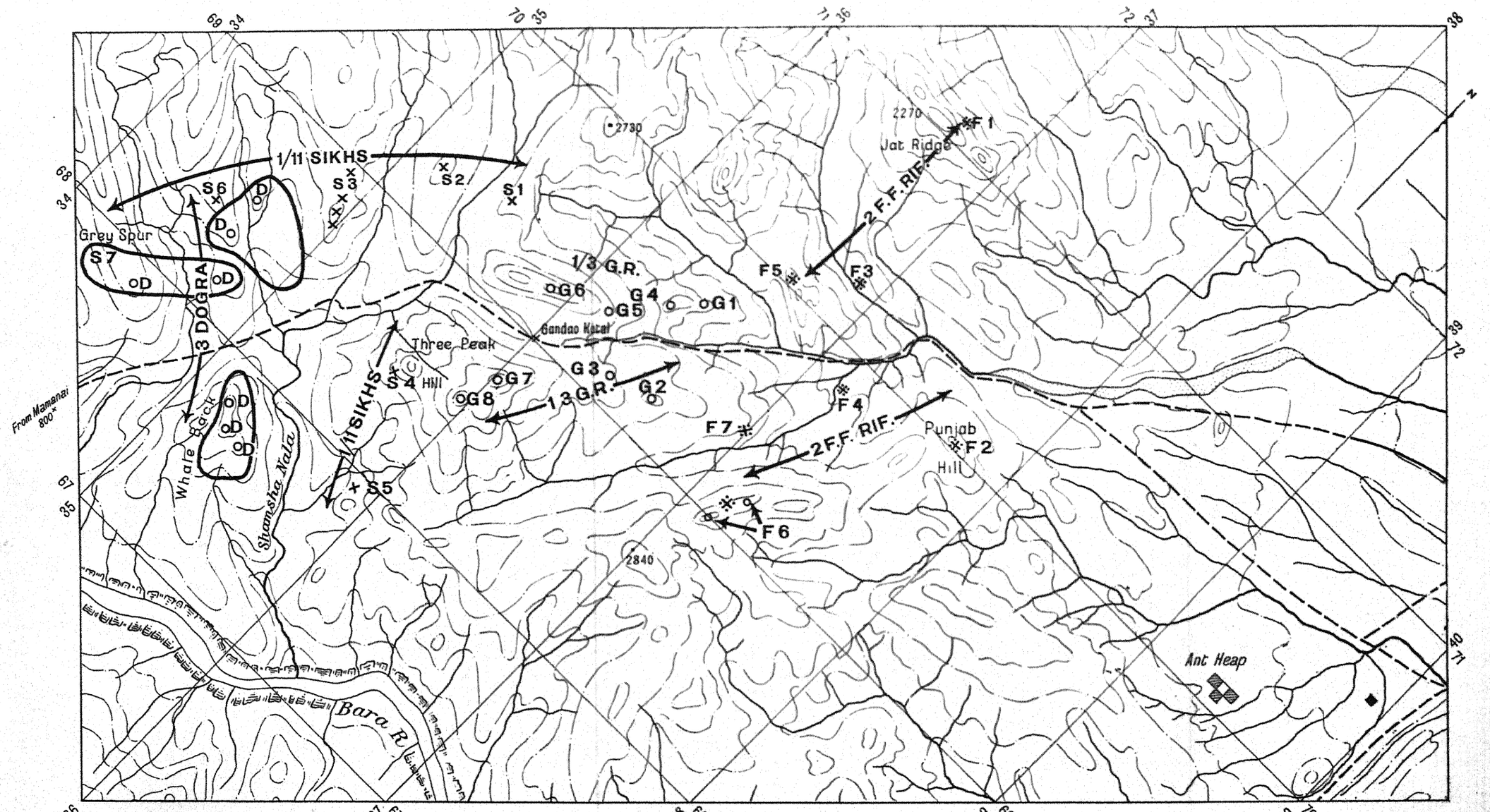
Furs. 8 7 6 5 4 3 2 1 0 1 2 3 4 Miles

Western limit of Operational Area.....

S.D.O.S.I. No. 6645. 1.32.

ENLARGEMENT OF PORTION OF MAP 38 5/5 — GANDAO KOTAL AREA.

Map D.



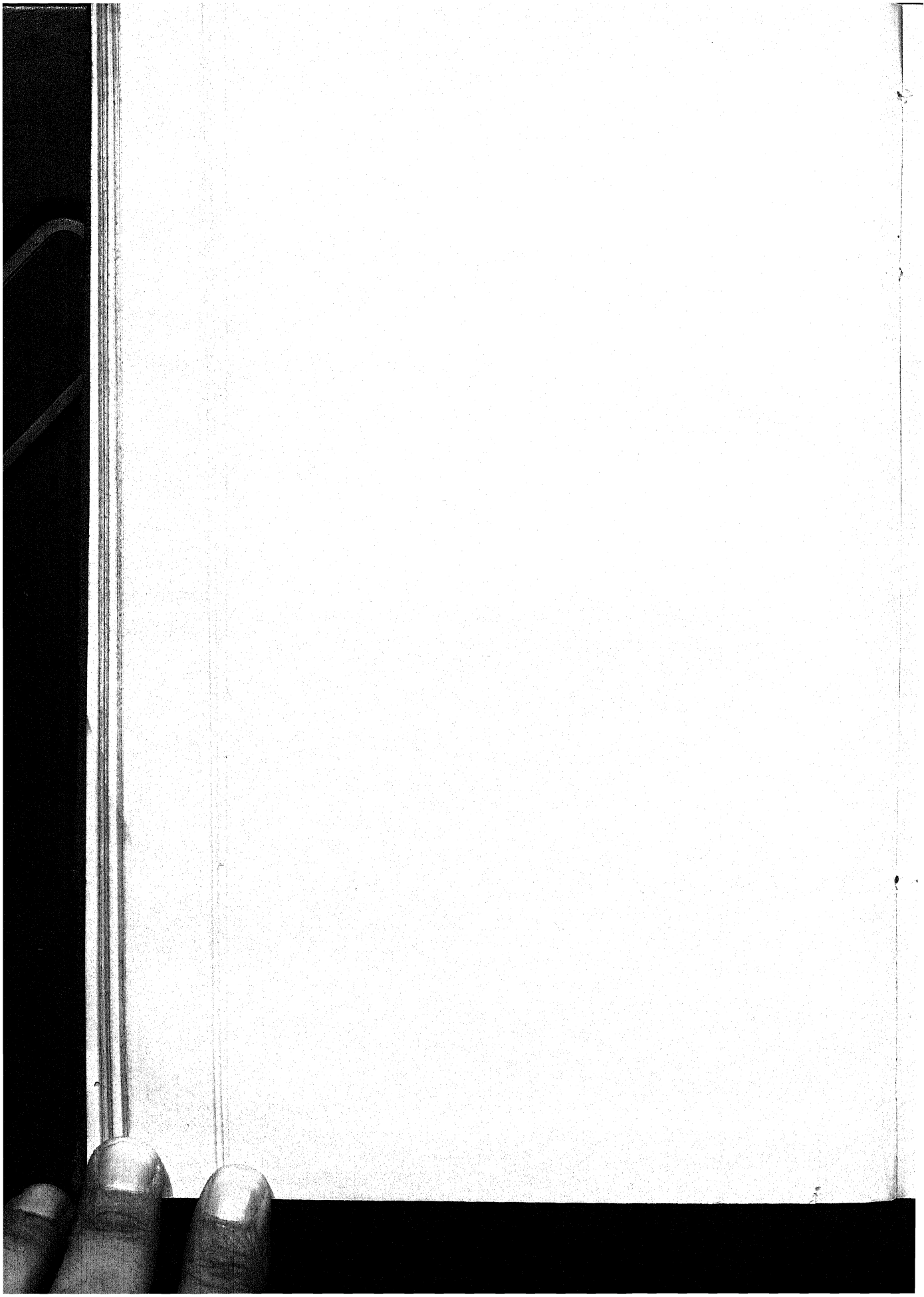
6.D.O.S.I. No. 6646, 1-32.

Scale 3 Inches = 1 mile.

Yds. 400 200 0 1 2 3 4 5 6 Furs.

Machine Gun Positions.

F = *2 F.F. Rif.* **S** = *1/11 Sikhs.*
G = *1/3 G.R.* **D** = *3/11 Dogras.*



THE BATTALION INTELLIGENCE PERSONNEL, AND THEIR TRAINING.

MAJOR D. B. MACKENZIE, 5TH BN., THE FRONTIER FORCE RIFLES

At the end of the Great War, battalions of the Indian Army possessed, for the most part, a small body of highly trained Observer-Scouts, who, as a result of war experience and of the excellent eyesight common among Indians, were of great value to the Battalion. The writer had experience of a Sepoy Observer being recommended for an award by an Artillery Forward Observation Officer for valuable assistance given during an action. The assistance in this case, took the form of repeatedly drawing the attention of the Forward Observation Officer to targets. The latter had the morning of his career, first shelling a counter—attack by a German battalion off a ridge, and then getting the howitzers to shell the *nallah* behind. Since the war a higher standard of map reading and sketching has been reached, which should make the Intelligence Personnel of more value than before.

As regards the use of the Intelligence Section in war two things are obvious; first, that observation to be complete and accurate must be continuous, and, secondly, that neither the Commanding Officer nor the Adjutant can do this. It is in this way that the trained Observer can prove his worth. Picture the Commanding Officer of a battalion at the outset of an encounter battle. He gets his orders from the Brigade, makes his personal reconnaissance and appreciation, "*liaises*" with flank units, prepares his orders, issues them, dictates some messages, and so on. During all this time things of which he must be acquainted are happening, enemy troops appearing and disappearing, machine guns taking up position, forward troops gaining a small success or being pressed back, cavalry coming in, flank units moving to their forming up positions. When the Commanding Officer returns to a position from which he can observe, he is out of touch with the situation. The observers, however, have seen all happening, and, if they know their work, can give him an accurate picture of the situation, and answer any questions which he may have to ask them about matters concerning which he is anxious. They are, in fact, the eyes of Battalion Headquarters.

On the North West Frontier we are up against all-round defence, and, therefore, all-round observation, not only of our own troops, but

of the enemy as well. The Battalion Observers then become even more necessary and valuable. Every piquet must be kept under constant observation by day and night. The numbers of the Intelligence Section may then require to be increased. Infantry Training is silent on the subject of Company Observers, but it is hard to see how a Company Commander can carry on without at least one, even when he is not writing a message, or giving orders. Two pairs of eyes are better than one, and it is often possible among Indians to find a sepoy who can see almost as well with his naked eyes as the average European can with the aid of field-glasses. It is true that to employ a man in this way takes a bayonet out of the firing line, but it is well worth it.

Organization.

The Field Service Manual allows us in peace, one Educational Jemadar, one Havildar, six sepoys, and three bicycles, and in war one Jemadar, (the Educational Jemadar), one Havildar, and eight sepoys—of which two go to the Brigade Intelligence Section—and nine bicycles. This establishment admits of one, two, or three observation posts being opened, but, if three are used, there are no reliefs or reserve, the men will speedily tire, and their work deteriorate. Normally, in each post, there should be one man observing, and one man noting down what is seen on an enlargement of the map, or on an eye-sketch. A Log Form can be kept if desired (a suggested-specimen is given at the end), in duplicate, and the original sent in to Battalion Headquarters as often as necessary. In addition, urgent information, such as the occupation or vacation of an important position by our troops or by the enemy, should be reported verbally, or by message, as rapidly as possible. The Jemadar, after hearing the battalion orders, and consulting the Adjutant, must site the observation posts as near as possible to the Battalion Report Centre, must reconnoitre alternative sites, and also make up his mind where the observation posts will go when the Report Centre makes its bound forward. The best observation is usually obtained obliquely, and the Jemadar must arrange this when detailing the frontage of each observation post. He must also ensure that the men in the observation posts receive all the information available about the enemy, the battalion objectives, boundaries, and dispositions, so that they know what to look for and can report the arrival of each company at its objective. No inter-communication personnel are included in the section, and it is unlikely that signallers would be available for this purpose. Therefore

the observation posts must be near the Report Centre if this is at all possible. If not, then they must be near the Runner Route, otherwise the information they obtain is likely to be of little practical use by the time it reaches an officer in executive command.

Training.

Their elementary training is comparatively simple provided the Educational Jemadar has passed well in map reading and reconnaissance at Belgaum, and has a graduate of the Roorkee Survey School to assist him. Infantry Training, Volume I, Section 149, 4, gives us a guide as to what to teach, the training of an observer being largely similar to that of a scout. The following subjects must be included :—

(*a*) Observing with eyes and ears, including the use of field-glasses and telescope.

(*b*) Use of ground in siting observation posts.

(*c*) Judging distance. Note that although a limit of 1,400 yards is sufficient for a N.-C.O., it is not so for an observer, who must use his skill in judging distance over longer ranges to enable him to recognise features on ground and map, and his skill in map reading to assist him in judging distances.

(*d*) Estimate numbers correctly. Practise in this is not easy to obtain.

(*e*) Read a map, make enlargements and eye-sketches, and, if possible, panorama sketches as well. Provided efficient instruction in panorama sketching can be given, men can be found who speedily become proficient in it. It is of great value in hilly ground.

(*f*) Know what to report and how to report it.

(*g*) Know semaphore.

The Jemadar should also be practised in reading aeroplane photographs.

All the above are important, but, in making up the programme of training, the most generous allotment of time should be given to map reading. In this the standard must be really high ; at least second class certificate standard. This includes identifying features ; all and any features, not easy features only, grid co-ordinates, horizontal clock code, taking and plotting compass bearings, and range cards. A King's commissioned officer should assist the Jemadar in the

preparation of the programme, and supervise the training to ensure that it is kept on the simplest and most practical lines and that the ultimate objective is maintained throughout.

General.

A fifty *per cent.* turn-over of the personnel should be the rule every year. Thus, well trained men will not be lost to the rifle company for long, and a reserve will be built up. This should encourage company commanders to part with their best, as they must, if the observers are to be of real use.

If the Intelligence personnel is properly trained, it is not too much to claim that the successful passing of a Battalion Intelligence Course, and service in the Intelligence Section should be one of the best qualifications obtainable by an ambitious young soldier for accelerated promotion. He gets education as he does in the signallers, but he also gets the habit of working on his own and of thinking for himself, in addition to a high standard of map reading, sketching, and report writing, all of which will be of great value to him in every rank from section commander upwards. If he is outstanding in any way, he is certain to catch the eye of the Adjutant, if not of the Commanding Officer himself.

LOG FORM INTELLIGENCE GROUP KE LIE.

Group ka number. . *Naksha jis ka hawala dia hai.*

Group ki position. *Tarikh.*

Wakt.	Kia dekha hai.	Compass bearing.	Position. *a.* Naksha se. *b.* Pari Ghari ke Tarike se.	Is ko dekhkar kia kia.

SEA BREEZES.

Being Extracts from the Diary of an Army Officer at Sea with the Mediterranean Fleet.

BY

Major T. A. Lowe, D.S.O., M.C.

The Highland Light Infantry.

"How these curiosities would be quite forgot, did not such idle fellows as I am putt them downe."—*John Aubrey.*

It is common knowledge that there is an interchange of officers yearly between the three Services. The Navy sends two to Camberley, and the Army sends two to Greenwich, while both send two to the Royal Air Force Staff College at Andover. This system has been adopted since the Great War, and although it has not yet been proved in practise, at least it can be said that there is a better understanding between the Services to-day than in the past.

The writer had the priviledge in 1924, of being sent to the Royal Naval Staff College for a year's study in Naval Staff work. The College is at Greenwich, and is part of a huge block of buildings which used to be called Greenwich Hospital, but is now known as the Royal Naval College. Innumerable courses of one kind and another are held there; Sub-lieutenants do their promotion studies, Lieutenants and Lieutenant-Commanders attend to learn about Cyphers and Naval Intelligence, Captains go for what is called a "War Course," (really very similar to our Senior Officers' School), and, last but not least, about thirty officers between the ranks of Lieutenant and Commander, become students of the Staff College. Though occupying a portion of the main buildings, the latter is an entirely separate entity.

Unlike the Army there is no age-limit for entrance to the Royal Naval Staff College, nor is there any preliminary examination. Officers go there by selection, and this is influenced by past records and by confidential reports. Specialists have no extra "pull": an equal number of Gunnery, Torpedo and Navigation experts, are balanced with "Salt-Horses" (equivalent of Regimental Officers), and Marines. The principal feature of the Royal Naval Staff College

is the lectures one hears there. The "silent" Navy tradition has proved a failure in an age when everyone talks, and Naval Officers are now encouraged to speak in public—the more lucid their speech the better! Each officer is required to give a lecture, (apart from the Staff lectures and those of many distinguished visitors), and one is amazed at the range of subjects covered. There are discussions afterwards at which any one in the audience may be nominated to speak, while the officers from the other Services attending are often closely cross-examined on such technical points as war establishments, armaments, etc., relating to their particular branch.

The sea is a romantic subject, even when it is being considered, from the point of view of International Law, strategy, trade, bases or fuel. Even as an attached soldier one gets impregnated with the romance of the sea at the Royal Naval Staff College. It takes some time though, to acquire the habit of thinking in ships instead of in men. A ship is victualled direct by the Admiralty before she starts her cruise, and that is the end of the business for a very long time. In the Navy you do not "march on your stomach." In this way Staff Officers escape much of that grinding "Q" work, which is inseparable from the Army. A ship is also oiled by the Admiralty before she starts her cruise, but that is quite a different box of tricks. The writer was by no means the only student who found himself, during a tactical exercise, with empty oil tanks in the middle of a vast ocean. How one wished that oil fields and re-fuelling centres were in more accommodating localities! For these reasons a naval tactical scheme becomes a much more concrete thing than a military one; the "nature of the ground" has not to be considered, nor has one the bugbear of "flanks" to worry about. At sea, if an enemy fires at you from a flank, all you have to do is to make a turn of 180 degrees and he becomes no longer on a flank but either straight ahead or astern, whichever suits you best.

We spent the first term in working up for the second term in which the three Staff Colleges met at Camberley for a big combined scheme. The third term (April-July) was one of pure joy. This was a term of travels and visits. At Weymouth we embarked in destroyers for a battle with submarines. We played the "Blues" at cricket at Windsor. We went to Portsmouth for a fortnight and studied all the organization of the shore establishments there. Living in the Royal Naval Barracks at Portsmouth was quite an experience. The

dining-room there is a wonderful place, decorated with an enormous frieze, hand-painted by the famous Wylie, of ships of the sailing era. A laborious work, but a work of love! You can sit at meals and visualize great sea actions of Nelson's time, and sailors of the present day are proud to point out how every detail of the sails and rigging is technically perfect. A Marine band plays twice a week at dinner, and once a week at luncheon (this being the routine of big-ship life at sea), because the Navy is extremely fond of music at meal times. The rooms are furnished like cabins, though of course, much larger than actual cabins in a ship—except in such monsters as *Nelson* or *Rodney*, where the architecture is altogether different from that of other ships.

We visited the Depot of the Submarines and put to sea, somewhat timidly on my part it must be confessed, for an exercise beneath the surface. A most uncomfortable and stuffy proceeding, terrifying when torpedoes were being fired. A destroyer dropped a depth charge on the submarine I was in and although it was reckoned to be a harmless charge our starboard light was stove-in and some damage done on deck. Even our "Captain"—an enthusiastic Lieutenant—struck me as being delighted to get to the surface again and to make signals to the effect that he was out of the game. Then we went to Felixstowe and flew about the coast in flying boats, my pilot taking great delight in descending from the skies upon parties of ladies bathing and apparently trying to cut their heads off. Judging by the screams and hasty dives, (in which I was longing to join), he very nearly succeeded.

Yes, that summer term was a real, swell term, and when, at the end of it, Admiralty told me I could do my practical training with the Mediterranean Fleet instead of the Atlantic—always provided I found my own way to Malta—I was enchanted. H. M. S. *Ceres*, a cruiser belonging to the Mediterranean Fleet, had just been recommissioned, and her Captain was a friend of mine. We left Sheerness on the 20th July 1925.

What follows is extracted from a diary I kept for the months I was with the premier Fleet. It will be noticed perhaps, that, with the exception of a little about the voyage in the *Ceres*, it chiefly concerns life in battleships, the reason being that these have by far the most comfortable places to write in. In the *Marlborough* (now

alas! in the ship-breakers' hands), I had most palatial quarters as she had been built for a Flagship but was not being used as such at the time, but in cruisers and destroyers one had to take one's chance, and sleep anywhere. However, I managed to keep my own little "log" as I went along, and it affords me infinite entertainment now. It is to be hoped that a few extracts may do the same to others.

The Diary.

23*rd July* 1925.—Bay of Biscay.—In H. M. S. *Ceres*. Attended "Divisions." (Morning prayers held on quarter-deck, usually about 9 a.m. in which all ranks on duty form a hollow square and the Captain with his officers in rear, reads prayers, or, if no chaplain is available, passages of Scripture on Sundays). On this occasion the Captain rebuked boys' division for not repeating responses, and again for not singing in the hymn "Onward Christian *Soldiers*."

Spent most of the morning on bridge watching ship's routine. Heavy swell, but sunshine.

Deck games during afternoon. Dinner a very cheerful meal owing to animated discussion amongst several Naval Officers about being called to the Navy in their youth. One described how he had been walking with his nurse in Portsmouth and had seen a drunken sailor fighting two policemen at once, and ever since then his one idea was to become a sailor too. Another related how a huge sailor with a great beard has lifted him up and kissed him as a child, and from that moment he knew his vocation to be the sea.

25*th July* 1925.—Gibraltar. Ship arrived about 5 a.m., and only stayed for four hours. The "Rock" and Spanish coast wreathed in mist. A cloud like a dirigible balloon was poised on the top of the "Rock" in spite of a strong westerly trade wind blowing the Mediterranean into a short, steep sea. This is cleaning-day in the ship, which is just as uncomfortable as spring-cleaning at home because every part of the ship seems to be getting cleaned at once and there is nowhere for a "passenger" like myself to go. So driven to see the engine-room with "Hugh" a large, bony Scot, who described his engines haltingly but with great affection. While we were in the boiler room a water gauge burst and boiling water seemed to squirt all over the place so that stokers ran for the ladders with

their arms covering their faces. What with the temperature of the boiler-room like an inferno and the glare from the oil fires making the place look devilish, my impulse was to bolt for a ladder too, but fortunately I didn't because "Hugh" treated the matter as normal, and gave some quiet orders for repairs to be carried out immediately.

26*th July* 1925.—A Sunday.—The Mediterranean very blue and calm. Ship's company dressed in white, with white *topees*—very smart! Walked round the ship with the Captain on his inspection. A bugler blew a "G" as we reached each deck. When the inspection was finished there was a muster of the ship's company on the quarter-deck. A circle is drawn on the deck and the men fall-in in single file looking aft. In turn, each man steps into the circle and recites his rating and badges, etc., to the Captain. The latter stops some of them and asks questions, or suggests a hair-cut or something of that kind. After this ceremony was completed we had a Church Parade for which benches were brought and arranged in hollow square. The Captain took the service himself, and in the middle of same published the banns of marriage between a seaman and a Maltese lady.

In the afternoon the ship suddenly slowed down and a boatswain ran about piping "All 'ands to bathe." The ship stopped, a bugle blew and in a moment the sea was full of shouting, splashing, laughing men. I got in as soon as possible, the water was deliciously warm. Another bugle blew and we all swam back to the ship. There was no officers' ladder so I had to take a chance of climbing the hanging ladder from the boom—a hazardous proceeding when you are not accustomed to it. Sailors are no respecters of persons and it was a case of the survival of the fittest. The ship was already under way by the time I regained the decks.

27*th July* 1925.—Watched section of Maltese stewards (including fat Carlos, the Captain's personal steward, fall-in for stretcher drill. The Instructor tried to teach them to "form-fours" but soon gave it up as impossible, his pupils seemed to be enjoying themselves so much, grinning happily and showing flashing gold teeth. Everybody was watching this pantomime, though of course pretending to be busy at something else, and when a sailor was detailed to be a "corpse" and to be carried by these Maltese to the Sick Bay, he first assumed an attitude of prayer which caused a roar of laughter fore and aft. When

the parade was over Carlos came up to me and said, "Me servee as officer in the Italian Navy allee great war, Sir. But these sailors they only laugh when I tell them and call me Bandy Beggar."

One of my shipmates has just finished an appointment as A.D.C., a shore job where his Commander-in-Chief had do a lot of entertaining. I walked the quarter-deck with him and asked him how he liked the job, to which he replied, "It was rather fun speeding the parting guests and welcoming the new arrivals with open arms. Just like an hotel porter." And again, "One got sick of sitting down to every meal with strangers. The way drunkards drink may be disgusting, but the way teetotallers *eat* is more disgusting still." We were joined by another officer who remarked, apropos of nothing, "When I grow a beard I look like the King." My companion enquired politely, "Which king?"

28*th July* 1925.—Captain invited me on bridge to watch approach to Valetta. We passed close to a yacht race, and General Congreve, who was then Governor of Malta, waved to us from the stern of one of the yachts. The Captain remarked how beloved Congreve was to the Navy, and how his enthusiasm for yachting was a great link between the Services. We received bugle salutes from two battleships lying outside the breakwater, and when we entered the Grand Harbour we had a great reception, as the *Ceres* was rejoining the Mediterranean Fleet after a long refit. The bands of the *Iron Duke*, the *Queen Elizabeth* and the *Eagle*, all turned out and played "Here we are again." One felt that the ship was coming home to a big family all of whom were glad to see her again.

30*th July* 1925.—My orders have come through. I am to be "discharged" from the *Ceres* to the *Marlborough*. I feel sad at leaving so many good friends and plunging into a completely new routine. We have a loving-cup in the ward room while my luggage is being piled into a piquet boat, then I dash for the ladder and disappear to a new world.

31*st July* 1925.—Went ashore to be introduced to the Island of Yells, Bells and Smells, as the Navy describes Malta. Two Greenwich colleagues acted as guides and pointed out (*a*) the goats for which Malta is so famous, (*b*) the tin cans upon which they browse. Visited Union Club for the first time and met about a hundred naval officers all of whom seemed to regard a soldier attached to their Fleet as some-

thing of a curiosity. (It isn't in the Atlantic Fleet, as nearly all the military graduates at Greenwich go there.) Afterwards spent a strenuous afternoon paying calls.

2*nd August* 1925.—The Commander-in-Chief (Sir Roger Keyes), came on board. He has recently taken command and this is his first visit to the *Marlborough*. He was received at the ladder by a massed piping of boatswains, the shrill sound of their whistles rising and falling like the wind shrieking round a house in winter. Then the band played a few bars of "A Life on the Ocean Wave," and the Marine Guard-of-Honour "presented." After the inspection all officers were fallen-in and introduced according to their Navy-list seniority. Commander-in-Chief very affable to me and hoped I was enjoying myself, which I assured him I was. The entire ship's company formed up and marched round the ship passing the Admiral, and saluting as they did so individually. A magnificent sight. Turn-out and physique wonderful!

3*rd August* 1925.—Visited the *Queen Elizabeth* for a discussion of coming cruise and exercises. Watched the ceremony of all the Admirals in the Fleet being piped on deck on the starboard side, while all the Captains scrambled up the port side without any ceremony. Managed to follow most of the technical side of the discussion. Coming cruise promises to be very interesting.

5*th August* 1925.—The Fleet put to sea. Went on bridge to watch, at the Captain's invitation, a marvellous sight. The cruisers left their anchorages and formed up outside the breakwater in line (known technically as the A—K line, in Army phraseology a protective screen), and then as the two battle squadrons got under way destroyer flotillas formed up as flank guards. The *Eagle* an aircraft-carrier, busy tossing off aeroplanes one after the other in quick succession, looked an ungainly sight in the centre of all. The first exercise was a scheme to defeat submarines (who were already in some unknown position), but one of them got through our defence and inflicted some damage. Stayed on bridge all day (my job was to keep the narrative of the entire cruise), and watched searchlight work at night. 'Snotties' in charge of searchlights got cursed (deservedly), for not repeating orders after Captain. Ship changing station the whole time by fixed navigation lights and W/T, otherwise total darkness. One W/T signal miscarried and the *Marlborough* got out of station. Glorious cursing match in which all ranks seemed to join!

6th August 1925.—At sea. Exercises continued. Visited various gun turrets in action, also ammunition magazine (beautifully cooled and ventilated). Watched charges and projectiles put into the lifts for the turrets. In the afternoon the *Emperor of India* suddenly dashed out of the line to help a destroyer save an aeroplane which had crashed. Pilot was saved but the tail of the plane was to be seen buoyed up and floating. In the Dog Watches the entire Fleet hove-to for bathing which was great fun as there was a heavy sea running, but smooth-topped so that swimming felt like a switchback. While we were dressing on the quarter-deck the sun set suddenly, and there was no following twilight. This was the first time this had happened: we were somewhere near Corfu.

After dinner went on bridge and watched night operations. The scheme was that the squadron was being attacked by a flotilla of destroyers. Searchlights were trained on bearings, both sides of the ship, from the bridge. Orders such as "Suspicious object, Green 40," or "Ditto, Red 20," were given, and star shell batteries trained on simultaneously. The formation of the Fleet was single line ahead, *Iron Duke* leading and giving the navigation signals. "*I. D.'s*" searchlights picked up attacking flotillas on both sides very quickly, and the lighting of targets was taken on by each battleship in turn. The destroyers looked very grim and sinister as they turned away to fire their torpedoes, the range being about 3,000 yards. Suddenly the whole squadron turned 180 degrees, steamed back on same course for half-an-hour, and then repeated the operation. This time the flotilla was located on the port side, and after a preliminary failure by *Iron Duke* was soon lit up again.

7th August 1925.—Woke to find land visible through cabin scuttle. Went on deck to watch Fleet being navigated into Corfu Harbour. The work of navigating on bridge was incessant for about two hours, the Pilot having to take bearings with the land as well as keeping distance and dressing with the other ships of the Fleet. Speed was constantly changed by signal until "Stop engines," was signalled. After that the ships ran on under their own speed for a few cable lengths, and then all dropped anchors together the anchor chains making a huge cloud of rusty dust. Each ship now dropped a cutter which rowed off to the *Queen Elizabeth* for orders, and we earned disapproval because ours got off clumsily. Dined that night in the

Barham, and had to jump for it in mess kit as there was a very heavy sea running and th' 'Snotty' in charge of the boat wouldn't go along-side.

13*th August* 1925.—Fleet left Corfu at 6 a.m. A scheme of firing at targets in the air towed by aeroplanes was tried, but unsuccessfully as the wire tow ropes parted with the strain. No actual shooting was done, but it was interesting to watch the *Eagle's* huge flying deck cleared for action. The 'planes came up in lifts and the ship turned into the wind, steaming at a high speed, to let them off quickly. We arrived at Argostoli at about 6 p.m.

14*th August* 1925.—Went ashore at Argostoli to see a quaint water-mill which is built on a stream that runs from the sea *inland!* This stream describes a zigzag course through a deep channel, turns the wheel of the mill in passing, and then completely disappears into the earth.

19*th August* 1925.—At sea. Big manœuvres start. We are the "Red" Fleet (*Q. E.*, *Marlborough* and *Emperor of India* with one cruiser squadron and attendant destroyers). We have no aeroplanes and an attack from the air develops against us by torpedo 'planes. These dropped from the air straight at us and discharged their torpedoes at about 200 yards range. Our gunners say they could have hit the 'planes in the air, but it all happened so quickly that I doubt it. Extraordinary sensation of watching the "Fish," *i.e.*, torpedoes, running towards us and the battleships being too big and clumsy to get out of the way. *Q. E.* was narrowly missed by a "fish" that passed just under her stern, but none of us were hit that time. The second attack, which developed about an hour later, was much more deadly and we had to turn 180 degrees to avoid the torpedoes. The "Battle" continued all night. I spent all the time in the Gunnery "Top," from which I had an excellent view—when it was light enough to see anything at all. We shall not know who won the great struggle until all the reports and plans have been received and discussed by the Directing Staff.

23*rd August* 1925.—Lemnos. Am detailed to join a destroyer which is making a day trip to Gallipoli so that officers may study the campaign. Early breakfast difficult to obtain as Maltese servants are at their worst at 4 o'clock in the morning. Joined the destroyer about 6 a.m., and found about 20 officers and 100 ratings from other

ships in the Fleet. Arrived off Cape Helles about 10-30 a.m., and landed at small jetty on " V " Beach. Coast still presents an extraordinary sight—a French warship sunk as breakwater with curious superstructures sticking out of the water, also some sunken British ships. On shore a great litter of railway lines, rusty old shells, barbed wire, scraps, etc., and a guard of dark-visaged, contemptuous-looking Turkish soldiers with rifles and fixed bayonets. Sergeant in charge of the Guard took an immediate dislike to me, and refused to let me land on Peninsula. He recognised at once that I was an Army Officer, which was clever of him considering there were Marines present and our tropical khaki was not vastly different. At length an Admiral persuaded him to let me land provided I was accompanied everywhere by two Turkish soldiers. Fortunately these soon grew tired of carrying their rifles in the heat and were easily persuaded to sit down and wait for me, when they were out of sight of their Sergeant. No one seemed to be able to explain why a large number of Naval Officers and Marines were allowed to do what they pleased, while one British Army Officer should be so suspected. I walked to each stage of the Helles attack and could read the history of the fighting by the graves (very well kept) *en route*. There are two big cemeteries on the final British line where terrific fighting took place. This was a first visit to Gallipoli and very impressive. Returned to coast by road to monument erected to commemorate the dead. This monument is built of white stone in the shape of a plinth about 100 feet high. Each stone rough-faced, but squared off neatly and very thinly mortared. Great slabs at the base bear the names of every unit which fought there. The whole plinth is enclosed in a beautiful wall of stone and approached from the front by tiers of steps. There was an eagle sitting on the top stretching his wings in the sunlight—an amazingly beautiful sight.

Returned to ship which now steamed along the coast of Gallipoli, past " W," " X " and " Y " beaches, and on to Anzac where spots like " Quin's Post," " Lone Tree," etc., are marked out by memorials. On all the beaches are scattered sunken ships and lighters: even a solitary mine lay stuck in the sand. The history of the Gallipoli campaign is very clearly written on the land, and every trench system was possible to follow. It will probably be so for many years to come.

(NOTE.—This was written in 1925, and probably the restrictions about British Officers visiting the Peninsula have now been removed.

The Turks chief fear at that time seemed to be espionage of the Straits).

25*th August* 1925.—All detachable material in the *Marlborough* has been dismantled as the heavy guns are to be fired. Carpenters have been strengthening the ward-room ceiling with enormous girders, and the scuttles have all been closed and screwed tight. My cabin presents a miserable sight, with the doors taken down and laid on the floor. The Captain ordered me to climb up to the Gunnery Top, and to ram cotton wool in my ears, which I did, and watched the Gunnery Officer and everyone working at their proper war stations. The ships of the 3rd Battle Squadron, (*Iron Duke, Marlborough*, and *Emperor of India* deployed to port and fired 13-inch salvos in succession. Great spouts of fire and golden-brown smoke would shoot out from the gun muzzles, and the ship recoiled to the shock like an earthquake. Noise awful; one's teeth rattled in the jaw bone, and every muscle and nerve seemed to jangle. This happened nine times so one felt limp, as if beaten, then the wireless failed so that we had to "go to bed" with one salvo still to fire—for which I felt profoundly thankful! Followed broadsides (eighteen in all) by the 6-inch batteries, but these were not so noisy, and I found it possible to observe the shooting, which was very good. The 13-inch were firing at targets over twelve miles away, so it was not possible to see how successful they were, though I heard afterwards it was very good.

30*th Aigust* 1925.—Salonika.—A day's shooting leave. Left ship at 6 a.m., four guns in all. Drove through Salonika and eventually struck the fine military road made by the British Army during the war as their line of communication to the front. Old dumps, etc., still there. About five miles out a strong covey of partridges crossed the road so we got out of car and tried to walk them up, but could not get near. Walked miles all morning but only managed to shoot a few snipe and three pigeons, though there was plenty of game and good sport could have been arranged with beaters. A 'snotty' bagged a goldfinch and a bullfinch and was very pleased with himself. Seemed quite upset when I cursed him. We drove on to a village called Lahana where I searched for the grave of a relative killed in the Struma show. Drove on through marvellous country over which the great retreat has taken place. Wonderful fertile valleys with maize crops and melons. The temporary wooden bridge over the Struma, was very

shaky but we got the car over. There was hardly any water and herds of hogs lay in the mud endeavouring to absorb some moisture. Long drive back to Salonika ; too late to go on board for dinner so had some food in a Greek cafe.

2nd August 1925.—Mount Athos. Steamed along shore of the Peninsula which is very beautifully wooded. Knife-edged hills with concave and convex slopes alternating, the many monasteries glistening red-roofed amongst cultivation. Some of these monasteries are on the shore, some inland. Went ashore with Admiral's party and landed at a place called Vatopedion, where we were received by a deputation of monks and all the church bells pealed a welcome which sounded very musical. A mad monk, picturesque in tattered black gown and tall black hat, preceded the party to the monastery. He had a yellow, grimy face, black whiskers and a shaggy beard, a tooth missing in front and a genial "Beggar's Opera" smile. The other monks seemed to take his presence for granted and nodded at us gravely tapping their foreheads with their fingers. A large parade of monks received us at the monastery, but none of them could speak anything but Greek, and modern Greek is a very difficult language.

Inside, a beautiful courtyard, with chapel in centre. Bells, very soft and musical, again pealed a welcome. Orange trees grew in the courtyard around the chapel. The buildings are of various heights, giving a picturesque, broken skyline ; each group has little wooden verandahs on the top floor, not the bottom. We entered one building ; a vile smell in the lower storeys but the air grew fresher as we mounted the stairs. Party ushered into the Guest Reception Room : arm-chairs ranged round walls, and many windows wide open giving wonderful views of the sea coast. We were all asked to sign the visitor's book and an interpreter mentioned that as no women were allowed at Mont Athos he hoped there were none in our party disguised as men, otherwise the monks would be very offended. At this announcement several of us had some difficulty in containing our mirth. We were then entertained to glasses of fresh water and red Turkish delight ; this refreshment was described as "Eucharist" or thanksgiving.

4th September 1925.—Kavala. Went ashore to meet G-O-C. Greek Fourth Army, who was giving a tea dansant in honour of the Fleet. He was dressed in olive-coloured uniform with numerous

decorations, and received us at the Town Hall, with great cordiality. Upstairs a number of people were gathered nervously in a semi-circle. Talk rather strained to commence with. I talked to a small, watery-eyed, fair, little Greek who had lived in Corfu and had learned to play cricket there. He chewed garlic. Tea consisted of Benedictine to start with, followed by tea and then liqueur brandy. Met a Greek Divisional Commander, who invited me to witness some manoeuvres of his Division on the following day. This invitation was cancelled the next day and, I fancy, the General got "ticked off" for his impetuosity.

14*th September* 1925.—At sea. Gun practice with the 1st Battle Squadron (*Queen Elizabeth, Barham, Valiant* and *Malaya*). We were what is called a "throw-off" target for them: they were shooting with 15-inch guns at a range of about 13,000 yards. Their shells fell just ahead of us as we steamed in line and when we made a turn of 180 degrees there was an intense concentration at the turning point. (This was apparently done with great success by the Germans at Jutland). Very impressive to watch their guns belching fire and smoke on the horizon, and then to see the great shells, deadly accurate, hitting the water ahead of us. If the slightest mistake had been made we should have been hit. A 15-inch shell makes a crackling noise as it hits the water and great fountains spurt into the air. Our decks were drenched with spray.

6*th October* 1925.—At sea (now in the *Malaya*,) "Guns" described exercises to be carried out, and firing at target ship—known to all as the '*Aggie Weston*.' The *Malaya* slapped along at about 24 knots for 4 hours, as she was doing high-speed trials as well. Very interesting to watch the *Aggie* steaming at about 15 knots and guided entirely by wireless, letting off her own smoke screens. She was fired at by our 6-inch guns which got several direct hits.

7*th October* 1925.—Malta again! Went ashore with a number of Naval Officers and met a great many more in the Union Club. Dined there and found the change of food very agreeable, after a long period at sea. Talk all about the cruise and the various exercises and manoeuvres, and general sympathy expressed for the "Staff," who had months of work ahead of them to bring out all the valuable lessons learned.

"Yells, bells and smells," still the predominating feature of Malta.

NINETY YEARS AGO.

By

Colonel M. A. Carlisle Crowe, (Late R. A.)

Two old letters that have survived the passage of the years recall an incident in the pacification of Baluchistan. The story is worth re-telling as there are lessons to be learnt from what befell those who took part in this small affair. The artillery details in the letters are interesting from an historical point of view.

The writer of the two letters, Henry Stamford, was commissioned the 9th June 1821, served in Burmah 1824-25, Kolahpoor Field Force 1827, Adjt. and Qr. Mr. 4th Troop H. A. Jan. 1832—3rd October 1835, Sind 1839-40 (attempt to relieve Kahun), Ordnance 1841-49, retired 31st March 1849. He had therefore seen a considerable amount of service at the time when he wrote.

That part of Baluchistan lying to the East of the Bolan Pass, is inhabited by the Bugtis and the Marris, two warlike and turbulent Baluch clans. After the operations against Khelat, which are too long to give here, it was found necessary to deal with these tribes. They were nominally, at any rate, tributary to the Khan of Khelat and like other frontier people were too much given to raiding their more peaceable neighbours in the plains.

A force under Major Billamore passed successfully through their hills in 1839, defeating the Bugtis and occupying Kahun, the Capital of the Marris, who had retreated with their families and cattle to the Northern part of their country. This occupation took place on 29th December 1839. Leaving at Kahun a detachment of one hundred men of the 1st Bombay Grenadiers under Ensign Peacocke, the Billamore Force left the hills in February 1840. A road over the Nuffosak Pass (Nuffosk in the letters) was made with some slight opposition from the Marris.

In the month of April 1840, a detachment was sent under Captain L. Browne, 5th Bombay Native Infantry to occupy Kahun permanently. It was composed as follows:—Three hundred bayonets 5th B. N. I. under Ensign W. W. Taylor, two 12—pr. howitzers under Lieut. W. Erskine (one was sent back from Surtof), fifty Sind Horse

under Lieut. W. H. Clarke, fifty Pathan Mounted Levies. It was to convoy six hundred camels with four months supplies for Kahun and then Lieut. Clarke was to return with fifty horse and eighty infantry to escort supplies for another four months. Owing to various delays the expedition did not start until 2nd May.

Poolagie lies about thirty miles north of the present site of Jacobabad; thence the road to Kahun runs over two difficult passes, the Surtof and the Nufossak—in all, a further distance of about fifty seven miles. Captain Browne forced these passes with some difficulty and occupied Kahun on the 11th May.

On the 16th Lieut. Clarke, 1st Bombay Grenadiers, left for Poolagie with one hundred and sixty bayonets 5th B. N. I. and fifty sabres Sind Horse. Having surmounted the first pass he sent back eighty bayonets and seven hundred unladen camels. This party fell into an ambush of two thousand Baluchis and was cut to pieces, only one doolie bearer escaping. Lieut. Clarke with the remainder were also attacked. Lieut. Clarke was killed and twelve men only escaped, together with the cavalry. The Marris, however, lost three hundred killed. Thus Lieut. Browne was left with one hundred and forty bayonets and one howitzer to defend Kahun. In the end, however, he held out till the 28th September, when he capitulated and marched out with the honours of War—an arrangement, it should be noted, which was honourably observed by the Baluchis.

This brings the story to the events related in the two letters. A relief expedition was organised, consisting of:—four hundred and sixty four bayonets 1st and 2nd Bombay Grenadiers, three 12—pr. howitzers with thirty four gunners under Captain Stamford, the whole under the command of Major T. Clibborn. At Poolagie this force was increased by two hundred sabres of the Poona Horse and the Sind Horse under Lieuts. W. Loch and G. Malcolm respectively. They had charge of a convoy of twelve hundred camels and six hundred bullocks.

They reached the foot of the Surtof Pass in five marches, it took them fourteen hours to get the convoy through. What follows is vividly related by Captain Stamford, though he hardly does justice to himself or to his gunners, for the reports, both official and private, agree in saying that it was the well-directed fire of canister shot from his howitzers that broke up the Baluch swordsmen and drove them back

with a loss of three hundred dead. John Jacob wrote :—" In fact, Major Clibborn gained a decisive victory, but was in turn, defeated by thirst and want of water."

Another who was present, wrote " We beat the enemy, but heat and thirst killed us. The men were frantic, mad ; Major Clibborn's conduct was capital—coolness itself, and he only abandoned his material to save the lives of the enfeebled and frantic survivors, after all his guns, horses, camels, camel drivers and followers had either fled or been killed. We have a nation in arms against us." The Baluchis had in fact, suffered severely, as was evident from the fact that they allowed the garrison of Kahun to march out unmolested later on.

Major Clibborn's loss was :—Officers killed—Captain C. B. Raitt, Lieut. R. R. Moore, Jemadar Jurakin Singh 1st Grenadiers ; Lieut. H. F. Franklin, Ensign A. Williams, Subadar Guru Baksh 2nd Grenadiers and one hundred and seventy nine killed and ninety two wounded, out of a force of about six hundred and fifty men.

Delay in starting the first force would appear to be the main cause of all the subsequent troubles, as it involved exposing troops to the summer heat of Sind. In that part of India the heat is appalling, unendurable. John Jacob wrote :—" The thermometer in the hospital shed (at Shikarpore in 1839) commonly stood at 130, and on several days it reached the astounding height of 140 ; one memorable day it touched 143 ! Dust storms like the blast from a furnace were common, sometimes accompanied by the *Simoom*—a poisonous wind which is equally destructive to animal and vegetable life." What must it have been in the narrow rocky passes without water !

The second mistake was sending small detachments hither and thither. The result of the employment of inadequate force is always the same—the loss of gallant lives and the work left to be done over again. After this affair the Marris and Bugtis considered themselves invincible and it was nearly forty years before they were finally brought to order.

Such are the lessons of Kahun and Nuffosak.

Letters from Captain H. Stamford (Bombay Artillery list No. 271) relating to the disaster at NUFFOSK in the attempt to relieve KAHUN, on 31st August 1840.

CAMP PHOOLAGIE,
September 5th 1840.

SIR,

I have the honor to report the death of two golundauz privates, of 5 artificers, 2 store laskars, 25 horses, 27 horsekeepers, 2 Artillery drivers, killed by the enemy on the 31st August, on which day the force under Major Clibborn was repulsed with terrible slaughter in an attempt to take the mountain pass of Nuffosk on the road to Kappun. I regret to state that the 3 howitzers, limbers etc.etc., were left behind on the retreat of the forces and that the enemy, following us up and harassing our rear succeeded in carrying off both the first, and on our disastrous retreat, nearly the whole of the armoury (sic).

All the stores, baggage and in fact nearly everything, every book, paper and document belonging to the 5th Company has been captured by the enemy, and I have nothing left but the clothes on my back.

We took ten days marching from this to Nuffosk, we retreated back in 48 hours. My exhausted state will account for this hurried letter and on my arrival at Sukkur I will endeavour to give a more detailed statement. Captain Brown and Detachment have been left to their fate which is, I fear certain death.

Yours obediently,

To Lieut. Hutt. (Sd.) H. STAMFORD, CAPTAIN,
Commdg. 5th Company.

CAMP SUKKUR,
September 28th 1840.

SIR,

In reply to your letter of this day's date I have the honor to state that I wrote to you officially on the 3rd from Phoolagie and again on the 13th from Shikarpoor on the subject of the late unfortunate affair in which I was engaged with the Force under the command of Major Clibborn. These two letters were addressed to you at Kurrachee, as I was not aware that you had left that station in order to proceed to Sukkur. I have not transmitted any official report to Regimental Head-Quarters as I conceived the proper channel of communication was through you.

It is my belief that the causes which led to the failure of the attack on the hill of Nuffosk were, first and chiefly, the smallness of the Force, the extremely difficult nature of the Country, particularly

for guns and laden camels and the scarcity of water. On arriving at Nuffosk the men were completely exhausted from fatigue in dragging the guns up steep and stony hills and lowering them down deep ravines (no water on line of march) and from exposure to a dreadfully hot sun, which was unavoidable owing to the time it occupied in bringing up the guns and the immense train of about eleven hundred camels laden with grain, etc., which it was found necesssary to guard by dividing the Force into three detachments so as to have an advanced guard, centre and rear guards, and with each of these was a gun.

Shortly after the rear guard came up the attack was made upon the hill by the advance of a body of infantry in three parties, and during the advance I was directed by Major Clibborn to keep the top of the hill clear by throwing shells.

The infantry advanced steadily up the hill to the attack and when they had arrived near the summit the guns ceased firing. Within a short distance of the top of the hill the progress of the infantry was impeded by breastworks built across the hill and other obstacles thrown in the way which were not perceived by us from the plain below, and it was when endeavouring to surmount these difficulties that a continued shower of immense stones was thrown in amongst them with incredible force and a fire of matchlocks opened upon them and a crowd of 500 or 600 Beloochies rushed impetuously down the hill and completely overwhelmed the advance already exhausted by a severe march, the want of water and the fatigue in getting so far up the hill which is very steep, and they were driven back with terrible slaughter, followed up by the enemy who, after driving the detachment from the gun on the left pushed on till they came to the other two guns and the main body of the infantry, where the fight was obstinately maintained for some time, the enemy coming close to the bayonets and the muzzles of the guns within a few yards of which many of them were killed.

When the advance fell back I loaded with canister but owing to the enemy being mixed up with our own infantry and scattered over the face of the hill I could not then fire. But afterwards and when they had nearly surrounded us and we were for a little time thrown into confusion I had an opportunity of firing on an opening presenting itself, and again on the retreat of the enemy up the hill.

I should have mentioned that we had been attacked the night before this and were under arms the whole night and that during the

latter part of the march on the following morning (the day on which we arrived at Nuffosk) we were also engaged with the enemy and several men were wounded.

As well as I am able to judge, the range from where the guns fired to the top of the hill might be between 300 and 400 yards and I had to give all the elevation the guns were capable of and for one of them I dug a hole to let the trail in so as to give more elevation. Spherical case, common shell and canister were fired and nearly all the ammunition in the limbers was expended, but a quantity equal to that contained in the wagon bodies of the two howitzer wagons and which was carried on camels (the wagon bodies having been left behind at Sukkur on account of the great weight) fell into the hands of the enemy during our retreat that night, or, rather very early on the following morning.

I am not able to state the quantity of ammunition expended and captured by the enemy, for the whole of the books and documents of the Company were captured by the enemy and the remnant of the Force arrived at Phoolagie after marching night and day with only occasional short halts for a few hours, with merely the clothes we had on when we commenced our retreat.

Many of the fuzes were cut and set when the Battery arrived here from Tatta (*a*) in May last and the number wanting to complete the quantity directed to be kept ready cut and set by Regimental order, was done by me before leaving Sukkur from a printed "Table of Ranges, lengths of fuze and elevations for field guns" given me by Captain Stanton before I left Bombay in February 1839, but I do not recollect the different lengths of fuzes. The Spherical case were fuzed for three different ranges, three shell for each range. I think the ranges for the former were 500,800,1000 yards (for howitzers 12 pr). and for the latter 800 and 1000 yards, but they were certainly according to the Regimental order when I cut the fuzes.

The greater number of the shells went over the hill which sloped down on the other side and I could not see the effect, but of those that struck the hill many of the fuzes did not ignite and I am inclined to think that many of them must have been loosened by the constant shaking in the boxes (one gun with horses and drivers rolled over down a hill during the last march and when in front of the enemy) and when fired must have fallen out.

(*a*) At the mouth of the Indus.

With regard to the behaviour and exertions of the men, I am sorry to say that they appeared to be quite overpowered by the heat of the sun and the constant marching, and they did not display that energy and willingness that might have been expected from the golundauz in getting the guns over difficult places on the line of march. They behaved well during the action (the latter part of it they fought for their lives) but after it was over every man laid down on the ground and when asked to get up the only answer I received was that they were unable to move and were dying for want of water, and I opened on the ground about 4 dozens of hot beer which many of them rushed at more like madmen than rational beings. The other officers also opened a great quantity of beer and distributed it in small quantities.

About sunset Major Clibborn received a report that the party of camelmen with the Puckauli camels, the gun horses, many of the officers' horses, a strong guard of Irregular Horse and a great number of followers who had gone to a place where it was reported by one of the guides that water was to be procured, had all been cut off in a ravine. Major Clibborn then decided on retiring to our last halting ground for water and he directed me to spike the guns and the order was given to commence our retreat as silently and as expeditiously as we were able, about 8 o'clock at night.

The enemy soon discovered that we had taken our departure and they followed up and eventually succeeded in capturing nearly the whole of the remaining camels and about Rs. 20,000, the latter belonging chiefly to the Commissariat Department.

The next day we were joined by some of the party who went to the watering place and who had contrived to escape the massacre in the ravine, and among them some 38 drivers and horsekeepers with 25 horses (one wounded), out of 65 of the former and 50 of the latter, and on the road as we continued our retreat we found many camp followers dead and dying, who had fled from Nuffosk when they saw the rush down hill.

Accompanying is a list* of the killed and wounded and missing of the Detachment of Artillery on the 31st August 1840, the day of the attack on the hill of Nuffosk by Major Clibborn.

I have the honor to be,
etc., etc.,
(Sd.) H. STAMFORD, CAPTAIN,
Commdg. Detachment Artillery.

*No list with the letter.

LETTERS TO THE EDITOR.

Emergency rations for Indian troops.

SIR,

As far as I know no tinned emergency ration acceptable to all classes of Indian troops has as yet been produced.

Chenna Chabina, gur, tea, etc., are not satisfactory and the jam tin type of containers are far too bulky. Many battalions make up their own emergency rations as does my battalion. These consist of a kind of biscuit, which, however, only lasts at the most three months and is spoilt by any moisture reaching it. Also, being carried in the aluminium tumbler or lota and easily accessible, it is liable to be eaten surreptitiously.

Any form of tinned meat is out of the question to all classes unless they are serving out of India, and biscuits, with which experiments have been carried out, are viewed with the gravest suspicion by Hindus unless again serving beyond Indian limits.

An emergency ration acceptable to all Indian troops is a great necessity, almost more so in peace in India than in war owing to the continual demands on troops for duties in aid of civil power necessitating detachments being despatched with little notice in different directions and with their communications liable to be interrupted for some hours.

The emergency ration must be acceptable to all classes so that the changing over of units in stations does not complicate supply arrangements.

My solution is an emergency ration consisting of cheese (tinned) and raw onions. Cheese is eaten by Mohammedans, Sikhs and most Hindus. European butter is readily eaten in place of ghi by all classes of Hindus and all troops prefer condensed milk to fresh, so that educating a taste for cheese should not be difficult, especially if the men become really hungry. There is nothing in its preparation that is obnoxious to any class.

The type of cheese and its packing which I have in mind is Nestle's Swiss Gruyere cheese (I have no interest in the company). Its packing is extraordinarily good; even after opening the tin it can be closed again with a close fitting, well overlapping lid thus protecting the remainder of the contents. Consumption can be controlled.

The type referred to has a key attached to open it; this could easily be replaced by a longer tab for finger and thumb.

The sustaining properties of cheese and onions are well known and raw onions have a great advantage in that they assuage thirst—a most important consideration—and are often eaten raw by all Indian troops; they are also an ordinary ration issue. Before, therefore, troops go off anywhere their aluminium tumblers or lotas should be filled with onions (at least three large ones) from the ordinary supplies in hand.

The production of a suitable type of cheese in India should not be difficult as tinned butter is already produced by several firms. This cheese would probably appear on the tables of some messes and the contents of the emergency ration would become known to all through the medium of the Mess Havildar and orderlies.

I do not know whether the claims of cheese as an emergency ration have been put forward before, but I have always carried cheese as my own emergency ration when operating several days away from my headquarters in the jungle during the past four months, and the above ideas occurred to me when, late one evening and far from home, I invited an Indian Officer to share the contents of my tin; this he did and was easily the faster eater! My men have also nearly always carried raw onions on their own initiative and eaten them like apples as sustainers.

Yours faithfully,
K. GODDARD, CAPTAIN.

RANGOON:
21*st October* 1931.

U-Boat Stories.

SIR,

In W. E. M.'s review of *U-Boat Stories*, published in your October Journal, occurs the passage, "That U-Boat Commanders were guilty of the greatest brutality and a cynical disregard for the exiguous decencies of war cannot be denied; neither can it be denied that this very savagery brought its own retribution in the shape of the United States of America."

May I be permitted to enter a mild protest on behalf of a very gallant body of men, who merely carried out the orders issued to them, as soldiers and sailors of all nations are expected to carry out the

intentions of the higher command. When those orders enjoined ruthlessness, some ruthless deeds were done. On the other hand there were very many instances when German submarine commanders risked everything by their humanity.

From the German official point of view, essentially logical, though by no means always wise, there was little ethical difference between ruthlessly blockading, with intention to starve, a civilian German population, and ruthlessly blockading, also with intention to starve, a civilian British population. Britain had command of the surface of the sea, Germany strove to attain command of the depths. On the surface, Britain could bring enemy vessels into port without undue risk; a German submarine could very rarely do so. In many cases a submarine after ordering a crew to take to their boats wirelessed an enemy port to send help, and there is no recorded instance of such help being interfered with, when it was sent. Neutrals were warned to keep out of certain areas at their risk.

The sinking of the Lusitania should not be taken as typical of the action of German submarine commanders. There is little doubt, that this was a genuine mistake, besides a fatal error of judgment, caused by very bad visibility, and nerves highly strained by long under-sea campaigning. Most of the 'savage and brutal' German submarine commanders are to-day living quietly and peacefully in Germany, with little on their consciences except perhaps anxiety for the future, 'axed' and forgotten like the 'savage and brutal' sailors of other countries. The U-Boat men and the Q-Boat men have the greatest respect for each others war-time courage and endurance.

To those who are interested in the actions of the German submarines, I would recommend the book *Raiders of the Deep*, by the American, Lowell Thomas. The chapters dealing with the trans-Atlantic raids and with the sinking of the Lusitania are especially worth reading.

MAYMYO, BURMA:
18*th October* 1931.

Yours faithfully,
KENNETH MASON.

MILITARY NOTES.

BELGIUM.

Appointment of Chef de Cabinet.

The new Minister for National Defence has selected as his *Chef de Cabinet* Major-General Maurice Tasnier, lately commander of the infantry of the 4th Division at Namur, in succession to Colonel de Grox, the *Chef de Cabinet* of the ex-Minister, Comte de Broqueville.

NOTES ON MILITARY REVIEWS.

"Bulletin Belge des Sciences Militaires."

Published by Imp. Typo. de l'Institut Cartographique Militaires, Brussels.

Price, 1·50 Belga.

August, 1931.

The Belgian Defensive System.

Explains the General Staff plan for the defence of the country which has received the sanction of the Chamber of Deputies through the vote of a portion of the credits necessary to put it into effect.

An interesting summary of the geographical considerations, which have always made Belgium a theatre of war in the past and are likely to do so in the future. Contains extracts from the statement made by General Galet, Chief of General Staff, before the Mixed Commission of 1928.

The fact that modern inventions, particularly submarines and aircraft, have made the neutrality of Belgium more than ever vital to Great Britain is duly emphasized. Considerable stress is laid on the suggestion that Germany's best lines of attack on both France and England lie through Belgium.

FRANCE.

NOTES ON MILITARY REVIEWS.

"Revue Militaire Francaise."
Published by Berger Levrault. Price, 5·50 francs.
July, 1931.

1. *Strategical Success—Tactical Successes.* (Part VIII.) Conclusion. By Colonel Loizeau.

In his summary the author deals with two theories of war; Falkenhayn's, which he calls attrition with limited objectives, and that of Foch, the destruction of the enemy forces. He sums up that strategic success can be obtained only by efforts directed towards a single objective inspired by a central idea following a plan which aims at the end of the war. Moltke failed through not controlling his army commanders; Falkenhayn was paralysed by the failures of his subordinates, while Ludendorff was led astray by the tactical successes he obtained. Foch alone followed his plan, kept to his idea, and reached strategic success.

2. *Geographical Objectives.* By Contre-Amiral Castex.

This article by the well known naval writer quotes many interesting historical examples, and arrives at the somewhat obvious conclusion that a strategic geographical objective is only legitimate when its attainment definitely assists towards the main objective—the destruction of the enemy forces. He then discusses at length Corbett's theory of limited war, which he considers a rather artificial definition, but concludes by giving the conditions under which he considers it might arise.

3. *The First Commander-in-Chief of the Russian Army.* (Part II.) Conclusion. By General Danilov.

The author carries forward the story of the war on the eastern front up to September, 1915, when the Emperor took over the nominal command, with Alexeiev as Chief of the General Staff. Throughout this period, the East Prussian salient was a constant menace to the Russian right flank, and there were insufficient forces to reduce this and at the same time maintain the main offensive against Austria, whom it was hoped to force out of the war. The state of the Russian

Army in 1915 is described as most lamentable; divisions were 5,000 men under strength, and the lack of rifles, machine guns and ammunition of all kinds was most marked. For instance, against a monthly consumption of 300,000 to 350,000 rifles, the factories could only produce 60,000 a month. The value to the allied cause of the Russian co-operation is shown by the claim that while in 1915 the German divisions on the western front remained at 83, on the eastern front the number of German and Austrian divisions increased from 50 to 137.

4. *The Reality of War.* By Major Delmas.

The thought in this article is somewhat confused, but it is intended to show that war is a matter of hard fact and reality, and must not be treated too much on the mental plane. The author considers it a combination of power and speed, and that the commanders require courage and imagination to make use of these factors, while the principal requirement in the leaders of small units is common sense and the ability to impress their personality on the men they lead.

5. *Marshal Macdonald and the Defence of the Lower Rhine.* Part I. By Captain Regnault.

Shows the complete state of disorganization of Napoleon's armies and of the frontier after the defeat of Leipzig.

Reviews.

Recent instructional methods in the British Army are analysed. German military papers are as usual fully reviewed, and there is a long precis of an article on artillery and tanks from the journal of the Royal Artillery.

GERMANY.

Combined Training.

The following account of a combined naval and military landing operation, carried out on the early morning of 15th July on the Baltic coast north-west of Swinemünde, is derived from the press.

The exercise was under the orders of the Artillery Commander of the 2nd Division and of the Commandant of the Swinemünde Defences. The army units engaged were a battalion of the 3rd Infantry Regiment which was on its way from East Prussia to Königsbrück Camp in Saxony to carry out its annual month's field training, and a pioneer detachment.

The battalion with its transport and equipment was conveyed from Königsberg to the Pomeranian coast in two hired transports, the rotor-ship "Barbara" and the s.s. "Stern," each of 2,000—3,000 tons displacement. The covering naval units of the landing force and the coast defence artillery of the defending force were imaginary, in order to avoid unnecessary expenditure.

Shortly before 3 a.m., as it was just getting light, the two transports approached the shore of the Island of Usedom in the neighbourhood of Bansin and Heringsdorf, under a smoke screen produced by a flotilla of six fast U. Z. mine-sweeping motor launches. With a view to economy, the smoke screen was only produced during the initial landing, instead of during the whole operation.

Under cover of the smoke screen, ship's boats and pneumatic rafts were lowered into the water, manned, and towed to shore by the coastal motor boats. The covering parties were opposed by troops of the 2nd Division, but made good their landing. The horses in box crates and vehicles were then lowered into six special horse-lighters, which were also towed until a depth of 2 meters was reached. They were then hauled further towards the shore by means of 6 hauling tackles constructed by the pioneers. The lighters had high flat sterns which were lowered to form a ramp. Each lighter took 6 to 8 horses only. Weather conditions were favourable and the landing was completed by 11 a. m.

SPAIN.

Ministry of War.

One of the first acts of the Provisional Government was to alter the name of the Ministry of the Army to that of the Ministry of War.

A Military Cabinet, details of which are not yet known, has been formed to come directly under the orders of the Minister of War. The officer personnel may belong to any corps or arm of the service.

SPANISH ARMY.

Pledge of allegiance to the Republic.

A. The following decree has been issued by the Provisional Government:—

Article 1.

All general officers on the active or reserve lists, and all senior officers and officers who have retired or been dismissed from the army, must, within four days of the publication of this decree, make a solemn promise of allegiance and loyalty to the Republic.

Article 2.

The text of the pledge will be—

"I promise on my honour to serve well and faithfully the Republic; to obey her laws and defend her with arms."

Article 3.

In all corps and military establishments officers will sign the pledge in the presence of the commanding officer or his delegate.

This article further refers to the facilities provided for officers, whether sick or abroad, to sign the pledge. Those abroad will do so in Spanish Embassies and Consulates.

B. The following is taken from the preamble to this decree :—

"The Revolution of the 14th April, which by the will of the people established the Republic in Spain, extinguishes the oath of obedience and loyalty which the armed forces of the nation had sworn to the institutions which have now disappeared. It is not in any way to be understood that the nation's forces on sea and land were bound by that oath by ties of allegiance to a dynasty or to a person. Article 2 of the Constitutional Law states that "the mission of the Army is to maintain the independence of the country.'

"The Government of the Republic has pleasure in making known its satisfaction at the behaviour of the 'military' during the recent crisis."

"The Republic, respecting individual conscience, does not enforce this promise of allegiance. Those who opt to serve her must make it; those who refuse to do so will prefer to leave the service. The Republic is for all Spaniards, but only those may serve her in confidential posts who unreservedly and fervently adopt the *régime*. The withdrawal of those who refuse this allegiance does not imply sanction but the ending of their engagement with the State."

The Provisional Government has issued orders to the effect that attendance at Mass in corps and military establishments shall in future not be compulsory.

Officers and other ranks who wish to attend Mass will do so without arms and not in formation, when the service is held inside the barracks. When held outside barracks tactical units will be formed, parade dress will be worn, but no arms carried.

It has further been decreed that military authorities shall, in future, not attend religious services officially, nor may they order the attendance of forces under their command. Officers and other ranks are free to attend such services individually, provided their duties permit.

Military bands will take no part in religious services either inside or outside barracks.

Reductions in the Spanish Army, the "Guardia Civil" and "Carabineros."

A decree has been published by the Provisional Government offering facilities for all officers, so desiring, to pass to the reserve or retired lists on full pay. This applies to the army, the *Guardia Civil* and the *Carabineros.*

This is the first step of the Provisional Government towards reducing the armed forces to a size proportionate to the needs and resources of the nation.

The Government's policy of reducing the army is being put into effect still further by the cancellation by decree of entrance examinations to the General Military Academy for the June term, for which 100 vacancies had been announced.

Disbandment of the Royal Escort and Halberdier Corps.

The Provisional Government has ordered the disbandment of :—

(*a*) The Royal Escort.

(*b*) The Royal Corps of Halberdiers.

The officers of these corps will be placed in the situation of "compulsorily unemployed."

The other ranks of the Royal Escort will be distributed amongst the other cavalry units in the Madrid garrison.

The other ranks of the Halberdier Corps will remain on full pay at the disposal of the Captain-General of the 1st Region.

Disbandment of the "Somaten" Corps.

The Provisional Government has decreed the disbandment throughout Spain, with the exception of Catalonia, of the *Somatenes.*

This semi-military corps was originally created, about 1875, as a local force in Catalonia. In 1923 General Primo de Rivera increased

its organization to a national one for the purpose of assisting in the suppression of disorders.

The personnel carried a rifle, but wore no special uniform.

The regular army officers who were detailed for service with this corps, numbering some 300, are being placed on the "compulsorily unemployed" lists.

District commissions are being appointed to check the disarming of the members of the corps and the handing over of accounts and property.

The colours are being placed in the infantry museum.

Centre of Higher Military Studies.

A Decree of 21st July provides for the organization of a centre, under the Central General Staff, to be known as the *Centro de Estudios Militares Superiores* (Centre of Higher Military Studies). This centre will be responsible for the preparation and carrying out of courses for preparing colonels for promotion.

The Chief of the Central General Staff will be the Director of the Centre.

The *Centro de Estudios Militares Superiores* will suggest annually a suitable date for the course for preparing colonels for promotion, the duration of the course, and the officers who should attend.

Engineer Corps.

In a recent Circular Order of the Ministry of the Army, provision was made for the creation of a "Centre for Signalling and Tactical Study for Engineers."

This centre will embrace the existing

Signal School.

Permanent W/T, Telegraph and Telephone Services.

Permanent W/T School.

Tactical School for Engineers.

The new centre will be located in Madrid in the premises of the former signalling school.

Changes in Organization.

By a decree dated 16th June, 1931, the following are abolished :—

The 50 recruiting and reserve zones with their infantry reserve circumscriptions.

All cavalry, artillery and engineer reserve depots.

All organizations responsible for the census and statistics of animals, vehicles, material and supplies.

Instead the decree creates 16 mobilization and reserve centres responsible for the preparation for mobilization of men ; the requisitioning of animals, vehicles, material and supplies of all kinds ; and the organization of the reserve units.

Mobilization and reserve centres will be administrative units. Each will be under the command of the G.O.C. of the division which includes the brigade it serves. The centres will be commanded by infantry lieutenant-colonels assisted by officers of all arms other than aviation.

The recruiting stations are reduced in number from 120 to 60.

The total reduction in personnel resulting from the above changes include 110 colonels and lieutenant-colonels, 40 majors, 210 chaplains, 220 corporals, 310 privates and 6 clerks.

SWITZERLAND.

Military Obligations.

Under the Federal Law of 12th April, 1907, every male Swiss citizen is liable to military service for a period of 29 years, commencing with the year in which he reaches the age of 20. In time of war or of national emergency men of 18 and 19 years of age may also be called out for service by order of the Federal Council (Cabinet).

The military liability covers both personal service, during periods of training or active service, and also the obligation to observe certain regulations at other times. Thus a man, when not undergoing training, is responsible for the care of his rifle and equipment : these are provided by the Government but become the man's personal property at the conclusion of his service. Men in the cavalry must keep and feed their horses, which they either purchase from the Government at reduced rates or provide themselves in return for some monetary compensation.

Members of the Federal Council, directors and staffs of public hospitals, and certain other officials whose services are indispensable, *e.g.*, police, are temporarily exempted from military service. Clergymen of recognized denominations must pass a recruits' course, but are otherwise exempt, except those who are military chaplains. Men physically or mentally unfit, those deprived of their civil rights on account of criminal offences, and those whose conduct whilst serving is unsatisfactory, are not called upon to serve. With these exceptions, the principle of obligatory military service applies universally, though in practice only about 60 per cent. of those eligible are normally required to serve. The yearly intake of recruits is at present about 25,000. All men who are exempted from actual military service for any reason, except employment in other branches of the public service, must pay an annual tax: this consists of a per capita charge and a supplementary tax on property or income and varies from a minimum of 6 francs (say 5*s.*) to a maximum of 3,000 francs (£ 120). During the 1914—1918 mobilization this tax was doubled. In addition, certain military obligations are laid upon the whole population, such as the provision of billets, and the supply of rations in return for payment; communes have to provide, free of cost, rifle ranges and suitable places for the examination of recruits.

Categories of personnel and strength of the army.

(*a*) *Permanent corps.*—The permanent corps is a small body of professional officers and non-commissioned officers, selected from volunteers. Besides forming an instructional cadre for the various arms, it provides the corps and divisional commanders, the general staff and certain other permanent personnel of the Federal Military Department (War Office). In 1930 the strength of the permanent corps was 301 officers and non-commissioned officers.

(*b*) *Categories of militia personnel.*—The Swiss Army is divided into :—

(i) Elite—first line	..Men aged from 20 to 32 (cavalry from 20 to 30); officers up to 48 according to rank.
(ii) Landwehr—second line	..Men aged from 32 to 40 (cavalry from 30 to 40); officers up to 48 according to rank.
(iii) Landsturm—third line	..Men aged from 41 to 48; officers up to 52.

Since 1925 the Elite and the younger classes of Landwehr have been to some extent amalgamated and a number of mixed units and formations of these two categories exist.

In time of war men of the Landwehr may be employed in the Elite and men of the Landsturm in the Landwehr.

(*c*) *Total strength of the army.*—The estimated total strength of the Swiss Army is as follows :—

Recruits under training	..	25,000
Elite	..	210,000
Landwehr	..	120,000
Landsturm	..	90,000

It is estimated that of the above, 300,000 would be required initially on mobilization. In addition, the strength of auxiliary services, particulars of which are given below, is about 200,000.

Periods of service.

The following details apply to all ranks ; additional courses and training carried out by officers and non-commissioned officers are described below. Men are enlisted in the year in which they reach the age of 19 and are classified as—

Fit for service.
Fit for auxiliary service.
Unfit for service.

The periods of service, which those passed fit have to perform, are—

(*a*) *Recruits' course.*—Each man is posted to one of the arms of the service on enlistment and is called up for his recruits' training during the ensuing year. The length of this course varies from 60 to 90 days according to the arm.

(*b*) *Repetition courses.*—Men of all arms except the cavalry attend seven repetition courses whilst in the Elite and one whilst in the Landwehr ; men of the cavalry attend eight such courses whilst in the Elite and none in the Landwehr. The duration of these courses is 11 days, excluding days of joining and dismissal, except for air force, artillery and fortress troops of the Elite, for whom it is 14 days. Men in the Landsturm attend no repetition courses.

(*c*) *Musketry courses.*—All men armed with the rifle fire an annual course in a rifle club during their service in the Elite and the Landwehr.

(*d*) *Inspection of arms and equipment.*—Every man in the Elite, Landwehr and Landsturm must attend an inspection of arms and equipment held one day in each year in which he performs no other training.

Training and promotion of officers and non-commissioned officers.

(*a*) *Elite.*—Officers and non-commissioned officers, whilst they serve in the Elite, attend various schools and classes of instruction, and also undergo an extra number of repetition courses additional to those mentioned in paragraph 4 (*b*) above. During their time in the Elite the total number of extra days' service thus performed is as follows, the difference in the number of days depending upon the rank and arm of the service of the individual :—

Officers	..200 to 499 days.
N. C. Os.	.. 80 to 262 days.

(*b*) *Landwehr.*—During their time in the Landwehr captains carry out two extra repetition courses; subalterns and N.C.Os. above the rank of corporal, one extra course. This does not apply to the cavalry

(*c*) *Air Service.*—Prospective pilots, who are either officers attached from other arms or promoted from the ranks of the Air Service, attend a flying course lasting 173 days. Pilots are divided into :—

(i) *Monthly pilots.*—These carry out two days' training per month and must complete 100 hours' flying per annum for two years. Monthly pilots after competing their two years as such may, if they wish, become reserve pilots not detailed for regular flying.

(ii) *Reserve pilots.*—Reserve pilots detailed for regular flying carry out 50 hours' flying a year. Reserve pilots not detailed for regular flying are only trained during the Air Service repetition courses.

(*d*) *General Staff.*—The following special courses are provided for the training of the General Staff :—

(i) Staff Course No. I, 70 days, for officers intending to join the General Staff. This qualifies for service on the Staff.

(ii) Staff Course No. II, 42 days, for captains, for qualification for promotion to Staff major.

(iii) Staff Course No. III, 21 days, for officers who have passed Courses Nos. I and II. This qualifies for promotion to Staff lieutenant-colonel.

In addition, Staff officers are called up every other year for 11 days' tactical training.

(*e*) *Promotion.*—Every Swiss soldier is bound to accept promotion, both to non-commissioned and to commissioned rank.

Only non-commissioned officers may be selected to pass through an officers training school. The conditions for an officers subsequent promotion are 4 years' service in his present rank and satisfactory attendance at the various schools and courses referred to in sub-paragraphs (*a*) and (*b*) above.

Army organization in peace.

(*a*) *Higher command and organization.*

(i) *The Federal Council*, or Cabinet, is the supreme head of the military administration.

(ii) *The Federal Military Department* is the military executive organ of the Federal Council; the head of the Department is a Federal Councillor. It is divided into 13 branches, including the General Staff Branch under the Chief of the General Staff, and the Infantry, Cavalry, Artillery and Engineer Branches under the chiefs of these arms. The Military Air Service is under the General Staff Branch. The duties of the chiefs of the arms comprise the study of general questions and the supervision of training affecting their respective arms.

(iii) The *National Defence Committee*, of which the head of the Military Department is the Chairman, considers all questions affecting national defence and consists of:—

The Chief of the General Staff.
The Chief of the Infantry Arm.
The Army Corps Commanders.

(iv) *The Army Corps Commanders* are 3 in number. They exercise no actual command in peace time, but supervise training, preparation of the troops for war, and the direction of manœuvres. The 6 divisions, most of the army, or non-divisional troops, and the fortress garrisons are distributed among the corps commands for these purposes.

(v) *The Cantonal Military Authorities* constitute a small military department in each canton. They keep lists of all those liable to service and ensure that the obligation to service is not evaded. They are charged with a number of administrative duties and are responsible for calling out the troops on mobilization.

(vi) *Territorial organization.*—The country is divided into 6 divisional districts from which units of the divisions recruit. For the purpose of organizing the auxiliary services in time of war the country is also divided into 8 territorial areas, each under a commandant and staff appointed in peace.

(*b*) *Divisional Troops.*

There are 6 divisions, each comprising—

(i) *Field Troops.*

2 Elite infantry brigades, each of 2 regiments (each of 3 battalions) and 1 Landwehr park company.
2 Landwehr infantry regiments, each of 2 battalions.
2 cyclist companies.
1 group of 3 machine-gun companies.
1 group of 2 dragoon squadrons.
1 field artillery brigade of—
2 regiments each of 2 groups of 3 field gun batteries (4 guns).
1 group of 2 field howitzer batteries (4 howitzers).
1 engineer battalion of 3 companies.
1 bridging train.
1 telegraph company.
1 medical group of 4 Elite companies and 1 Landwehr company.
1 field hospital with 4 ambulances.
1 medical transport group of 8 ambulance columns.
1 supply group of 2 Elite companies and 1 Landwehr company.
1 motor transport group of 4 columns.
1 mountain train group of 2—4 columns.

(ii) *Mountain Brigade.*

1 Elite mountain infantry brigade of 2 regiments (each of 3 battalions), 1 park company and 1 mountain transport column.

Note.—The mountain infantry brigade in the 5th Division has an extra regiment.

1 Landwehr mountain infantry regiment of 2 battalions.
1 mountain artillery group of 2 batteries (4 guns).
1 mountain engineer company.

1 mountain telegraph and signal company.
1 mountain medical group of 3 companies.
1 mountain supply company, with 1 motor transport section.

(*c*) *Army Troops.*

Army troops, other than those which form part of the Fortress Garrisons, comprise—

(i) *Elite, or Elite and Landwehr mixed.*

3 cavalry brigades.
3 cyclist groups.
1 motor cyclist company.
4 heavy artillery regiments, each of 3 groups, each of 2 batteries.
1 balloon group of 3 companies.
1 searchlight group of 3 companies.
3 army bridging trains.
1 telegraph company.
1 wireless group of 3 companies.
1 mining battalion of 6 companies.
9 bakery companies.
Aviation troops (*see* sub-paragraph (*d*) below).

(ii) *Landwehr.*

6 infantry brigade staffs.
6 machine-gun companies.
30 dragoon squadrons (dismounted).
6 machine-gun squadrons.
6 engineer battalions, each of 3 companies.
7 telegraph and signal companies.
28 ambulance trains.

(*d*) *Aviation troops.*

The Military Air Service, as stated in sub-paragraph (*a*) (ii) above, is directly under the General Staff Branch of the Military Department, and is commanded by the Chief of the Military Air Service. It is organized into 5 aviation groups, each of 6 aviation companies: of the 5 groups 1 is a group of fighters and 4 are observation groups. At present only 3 group headquarters, 6 fighting and 12 observation companies exist. An observation company has 6 or 8, and a fighting company 9 or more, aeroplanes.

(*e*) *Fortress garrisons.*

The St. Maurice and St. Gothard fortresses are situated on the southern French and on the Italian frontiers respectively. The garrison of St. Gothard is approximately double the size of that of St. Maurice. The fortress garrison troops comprise—

(i) *Elite or Elite and Landwehr mixed.*

2 mountain machine-gun groups, each of 2 Elite companies and 1 Landwehr company.

5 fortress artillery groups, each of 2, 3 or 4 companies.

4 tractor-drawn artillery regiments, each of 2 or 3 groups, each of 2 or 3 batteries.

1 or 2 artillery observation companies.

2 mountain searchlight companies.

2 mountain engineer companies.

3 telegraph and mountain signal companies.

2 supply companies.

(ii) *Landwehr.*

3 mountain infantry regiments, 2 of 2 and 1 of 3 battalions.

4 telegraphs and mountain signal companies.

(*f*) *Landsturm.*

Since its reorganization in 1930, the Landsturm forms an integral part of the army and is under the control of the General Staff Branch of the Military Department, but in principle the cantons are responsible for administration. It consist of men who have completed their Landwehr service, men prematurely discharged from the Elite or the Landwehr, men unfit for the Elite or Landwehr, and volunteers, who are accepted as conditionally suitable but undergo no training, inspection or medical examination in peace. Its tasks on mobilization are two-fold, *viz.* :—

(i) To cover the mobilization of the field army by guarding the frontiers and important points, and by carrying out special missions.

(ii) To reinforce the technical arms of the Landwehr and to carry out particular duties, such as demolitions.

In consequence of the first of these tasks, the Landsturm infantry and cavalry are organized on a Territorial basis, and the men belong to units in their home districts. In order to fulfil the second task, the organization of the Landsturm technical corps (artillery, engineers, signals, aviation, transport, &c.) is based on that of the Landwehr; for each technical unit of the Landwehr, or Landwehr and Elite combined, there is a corresponding Landsturm unit designated by the same number.

The Landsturm is organized into—

70 infantry battalions of from 2 to 6 companies.
60 machine-gun companies.
15 companies of dragoons (dismounted).
43 field and mountain artillery companies.
35 medium and heavy artillery companies.
15 fortress artillery detachments.
20 engineer detachments.
8 bridging detachments.
Ancillary troops and services.

(*g*) *The Auxiliary Service.*

This is composed of men who are medically unfit for the Elite, Landwehr or Landsturm, but who are capable of performing non-combatant services for the army or the Government in the event of mobilization. They undergo no military training and pay the military tax for any year in which they perform no duties.

The obligations of these men extend until the end of their 48th year; when called up they are subject to military law. They are classified in various categories according to the nature of their duties; but in peace only those classified as "Pioneers" are organized into cantonal detachments of 250 men. Personnel of the auxiliary service wear plain clothes, with a Federal brassard, a cantonal cockade, and a band on the head-dress indicating the category to which they belong.

Mobilization and war organization.

(*a*) *Higher command.*

As soon as the mobilization of the army is ordered, the Federal Assembly (Parliament) appoints a Commander-in-Chief and the functions of the National Defence Committee cease; pending his nomina-

tion, the Military Department assumes command of the army. The Federal Council, after consulting the Commander-in-Chief, appoints a Chief of the General Staff, and an Army Staff is formed, presumably from the General Staff.

(*b*) *Mobilization procedure.*

(i) *General.*—The mobilization of the Swiss Army is exceptionally rapid for the following reasons :—

The army is organized almost entirely on a territorial basis; men live near their centres of joining; distances are small.

The war establishment of every existing unit is the same as its peace establishment.

No increase in the number of formations or units is contemplated.

Every man keeps his own arms and personal equipment and, in the case of cavalry, his horse.

The mobilization arrangements are put to a practical test every year when men are called up for repetition courses and manœuvres. The general procedure, both in peace and war, is the same.

If the order to mobilize were issued in the early morning, infantry, cavalry and engineer units would be ready to move from their places of assembly the same evening under normal circumstances, the whole army would be completely mobilized by the end of the third day. On mobilization, the whole frontier would be immediately occupied by covering troops from the Landsturm, who, if seriously attacked, would probably withdraw to the mountainous regions surrounding the central plateau.

(ii) *Landsturm.*—As stated above, one of the duties of the Landsturm is to cover the mobilization of the field army, and with this object in view, it is organized so as to mobilize with an absolute minimum of delay. Every Landsturm man joining for active service must bring with him two days' rations, and units organized on a territorial basis must take up their duties by the morning of the first day of mobilization. It is, however, problematical whether all Landsturm units could arrive on the frontier in time; to meet this difficulty it has been suggested that patrols armed with light automatics and consisting of men from the Elite, Landwehr and Landsturm, who know the country well, should be

organized at once and pushed forward to act as a delaying force. Wherever independent rôles have been assigned by the General Staff, all preparations to carry out such instructions are worked out by Landsturm unit commanders in peace, for which special purpose the law provides for practice exercises of from one to three days' duration. It is open to question whether men of the Landsturm, in view of their long absence from training, are really qualified to play this vital rôle. Another difficulty is the fact that volunteers accepted as conditionally suitable for the Landsturm in peace only undergo their medical examination on mobilization, after which their allotment is to be decided by G.H.Q., at a time when it would be already preoccupied with other and more important problems. When the mobilization of the field army is completed, the Landsturm would be available to work on the lines of communication.

(iii) *Auxiliary Service.*—All men of the Auxiliary Service report on mobilization to the headquarters of their Territorial Area, where they are mobilized into detachments.

The Military Police Force, which does not exist in peace time, is recruited up to requirements on mobilization from the cantonal police forces and volunteers among the troops. It comes under the Commander-in-Chief.

(*c*) *Territorial Service.*

The Territorial Service system is one of the most important features of the Swiss military organization. As already explained, the country is divided into eight Territorial Areas. The Territorial Service is responsible for supply, and assures the rearward services up to the point where the lines of communication service commences its duties. The cantonal military authorities become the executive organs of the eight Territorial Commandants for carrying out orders received from the Military Department. The duties of the Territorial Commandants include—

(i) Calling out the Auxiliary Service.

(ii) Total or partial evacuation of particular regions.

(iii) The military control of their areas, control of foreigners and the press, protection of the frontiers by police.

(iv) Requisitioning.

The territorial commandants command the Landsturm and Auxiliary Service in their areas; if necessary, elements of the Elite and Landwehr may also be placed under them.

Training and tactics.

(*a*) *General.*

Military activity plays a leading part in the life of every male Swiss citizen. Before his actual militia service he undergoes preparatory military instruction, and he belongs to a rifle club and attends meetings organized by the numerous military societies which form part of the social life of the country. Officers' societies exist for the purpose of carrying out exercises on the map, staff tours and lectures.

(*b*) *Preparatory military instruction.*

In view of the small amount of time available for the training of recruits, great importance is attached to preparatory military instruction, which is supervised by the Military Department.

This consists of :—

(i) *Obligatory gymnastics.*—A minimum of two hours a week in all public and private schools for all boys between the ages of 7 and 15, unless exempted by the Military Department. Instruction is in accordance with a Federal Manual and the Federal Council has the right to order inspections. Cantons render reports to the Council every three years. Instructors are trained in the schools and in advanced courses organized by the Military Department.

(ii) *Voluntary courses* after leaving school. These comprise :—
Gymnastics.
Preliminary small arms training.
Musketry courses.

The inculcation of patriotism and a high *morale* plays a large part in these courses, which are organized by a Central Committee in each Canton. These Committees must be approved by the Chief of the Infantry Arm. The first two of the above courses may be taken in 1 year, but the third cannot be taken till the year after. The Government defrays all expenses and provides arms, ammunition and equipment, and insures participants against accidents; it also grants a subsidy to rifle clubs for each member who carries out the full programme. The instructors (except in gymnastics) are subject to military law.

(*c*) *Rifle Clubs.*

The rifle club organization, which dates back to mediæval times, is a valuable adjunct to military training. The membership in 1929 was 205,000. The Government subsidises approved rifle clubs by the provision of free ammunition, free instruction, free accident insurance, and monetary grants. Only army rifles may be used. Men of the Elite and Landwehr fire their annual musketry practices in these clubs and, if they fail to complete them, must attend a 3 days' musketry course, without pay, in the autumn. Every commune has to erect and maintain a 300 metres range. The private competitions of the rifle clubs are one of the principal events of the year in Switzerland, but are of a festive and patriotic character and the conditions under which they are held are not of a practical nature from the military point of view.

(*d*) *Army training.*

The training of recruits and units up to brigades is in the hands of the militia officers and non-commissioned officers, who are likewise responsible for the administration of their units, and must consequently perform a considerable amount of unpaid work. The supervision and general direction of training is carried out by the Permanent Corps.

In order to utilize to the full the short periods of training available, all non-military duties in the army are carried out by civilian personnel.

The organization of the training in the repetition courses is designed to ensure that each man undergoes progressive stages of individual and collective training. There are three such stages, *viz.* :—

Elementary training.

Detachment training—including battalion training, brigade or inter-regimental training, and divisional or inter-brigade training.

Manœuvres.

A division carries out one stage each year, two divisions in any one year being engaged on each of the three stages. Thus, in 1929 and 1930, divisions were trained as follows :—

——	Elementary training.	Detachment training.	Manœuvres.
1929	4th and 5th Divisions	1st and 3rd Divisions	2nd and 6th Divisions
1930	2nd and 6th Divisions	4th and 5th Divisions	1st and 3rd Divisions.

Army Budget.

The Swiss Army budget amounts to nearly 23 per cent. of the total national expenditure; the Swiss Army is committed, to a greater degree than in most other countries, to meeting—

(i) The cost of civilian officials and employees to take charge of barracks, stores, &c., and carry out duties of a non-military nature. The explanation of this is the militia organization, under which military personnel do not serve continuously and are therefore not available for such duties.

(ii) The expenses connected with preparatory military instruction.

The gross expenditure since 1926 on the army, including the air force, is as follows:—

	Millions of francs.	
1926	91·5	Closed Accounts.
1927	90·1	
1928	91·2	
1929	89·4	
1930	86·7	Estimates.
1931	92·9	

The increase in 1931 over 1930 consists of an extra 5·6 million francs for training and ·6 millions for equipment. Small sums of 45,000 francs for pensions and 1,000,000 francs as grants on account of permanent disablement are included in the 1931 estimates.

Apart from the above expenditure, a special credit of 20 million francs for the re-equipment of the air force was passed by the National Assembly in June 1930, to be spread over three or four years.

Another special credit of 16 million francs was granted in 1930 to be spread over the two following years for the replenishment of stocks of clothing and equipment. According to the League of Nations Armaments Year Book, among the annual subsidies granted by the Government to the cantons, a sum of about 49 million francs is devoted to military and physical training; but it is not known whence this sum is provided, as it does not appear to figure in the Federal Budget.

War material and resources.

(*a*) *Armament and equipment.*

The armament and equipment of the Swiss Army are generally speaking sufficient for its needs, though they do not compare with those

of the more highly developed forces of the great nations. The infantry possess machine-guns, light automatics, gas masks and steel helmets. They have no trench mortars or anti-tank guns. The proportion of field artillery to infantry is very small, namely 64 field and mountain guns and howitzers to the 24 battalions in each division. The so-called "heavy artillery" is in reality only medium, the heaviest piece being the 15-cm. howitzer. Much of the second line transport is mechanized and most of the heavy artillery is tractor drawn. There are no armoured fighting vehicles, either tanks or armoured cars, and no anti-aircraft artillery. The Swiss military authorities are now considering further developments in armament, particularly in aircraft, and in anti-tank, anti-aircraft and anti-gas equipment. Though formerly sceptical as to the value of tanks in their country, on account of the snow conditions rather than of the terrain, they now appear anxious to test the performance of track vehicles on their mountain roads.

(*b*) *Resources.*

Generally speaking Switzerland is dependent upon foreign supplies of food and raw materials, in which her resources are limited, though she is well equipped as regards industry and skilled labour. The question of food supply might be a serious problem in war. As regards horses, the cavalry only is in permanent possession of horses in peace; horses for other arms required for training are procured from the Horse Regie, Thun, which hires as necessary from private individuals and contractors. In time of war the Government has the right to dispose of all horses in the country, registers of which are maintained by cantons and communes. Riding horses are all imported. Mechanical transport is ample and civilian vehicles are registered and liable to requisition on mobilization. There are no internal supplies of oil and coal, but the lack of these commodities is being largely made good by the development of water-power and consequent electrification of the entire railway system, already more than half completed. All military necessities except actual guns and heavy gun parts can be produced in the country; the principal government arsenals are at Berne, Thun and Bienne. Aircraft have hitherto been usually purchased abroad, but all new machines are to be manufactured in the country, mainly in the State factory at Thun and also by private firms.

REVIEW.

THE INDIAN CIVIL SERVICE, 1601—1930.

By L. S. S. O'Malley, C.I.E.

(*Murray, London*) 12*s. net.*

Amongst the gaps in the administrative history of modern India none has been more remarkable than the lack of any self-contained account of the civil service of Crown and Company. As Sir W. W. Hunter wrote more than a generation ago, "the Bengal army, the Madras army, the Company's artillery and navy has each its separate historian; the soldier politicals have an honourable literature of their own. The Indian Civil Service has found no annalist." Since Hunter's day, too, yet another service has found its historian, for Colonel D. G. Crawford's *History of the Indian Medical Service* (1914) and *Roll of the Indian Medical Service* (1930), have completely eclipsed every other work of their sort, in their full treatment of all the facets of a vast subject, the manifold evidences of wide and deep research which they contain, and, above all, their extreme accuracy.

There is no doubt that in nothing short of a history on Colonel Crawford's ample scale could justice be done to the I. C. S. But as a precedent to the production of such a book it would be necessary to devote say thirty years to intensive research (as Colonel Crawford did), and the financial problems of publication would moreover not be easy to surmount. Mr. O'Malley has—rightly, in my judgment—therefore decided on a compromise. In a book of just under 300 pages, of the format of an ordinary novel, and costing only twelve shillings, he has assembled a dozen chapters on the history and activities of his former service.

It would be absurd to pretend that he has done more than provided the briefest sketch of the development of the I. C. S., and he has perforce only brushed the fringe of a multitude of interesting subjects. What he has done is to describe what was first essentially a merchant service (1601—1772); to show how it became a civil administration (1772—1793): how it developed under the East India Company (1793—1857) and under the Crown (1858—1914). Then he takes us through

the actions and reactions of the War (1914—1918) and post-War (1914—1930) periods : discusses bureaucracy in one chapter and " the Service and the people " in another ; and then turns to Indianization and its implications. After a note on selection and training, he adds two chapters of considerable personal interest, one on those Civilians who have distinguished themselves in other spheres of activity—as the Civilian always has done and still continues to do, for have we not two Governors-General in office to-day who only left the I. C. S. a few years ago—and, lastly, the chapter on Civilians and literature.

Taking every difficulty into consideration, I think that Mr. O'Malley has produced a remarkable summary of the I. C. S. from its earliest days. Possibly the *magnum opus* will never be written ; but we shall miss it the less now we have this fine pioneer effort, which can be recommended with confidence to every Mess and Brigade library.

H. B.

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EDITORIAL.

The Disarmament Conference.

It is a little early to estimate what the practical results of the Disarmament Conference now sitting at Geneva are likely to be, but after the opening spate of speeches it seems that the delegates are showing a tendency to form two main groups. The division is between those who follow the French in thinking that the League of Nations should have powerful armed forces under its own direct control to impose its authority over recalcitrant states, and those who aim rather at a reduction of individual national armaments and a League of Nations that relies on moral strength gained by the marshalling of world opinion behind it. It is the difference between settling disputes by a policeman who can if necessary use a truncheon or by an arbitrator who can only appeal to the common sense of the disputants and the sense of justice of their neighbours. Which system is more suited to the present stage in national development is a question not easy to answer ; on the whole it is safe to say that the genius of the Anglo-Saxon races will be against the possibly more logical French conception. We do not like over-much regulation by outside authorities in our private lives, and we are the world's greatest exponents of illogical compromises which to everyone's astonishment work extraordinarily well in practice; what suits us in our own personal affairs will probably appeal most to us in international relations.

In spite of this and in spite of the immense difficulties that its practical application would meet the French scheme is more clearly conceived than any other put forward. It should, and at the Conference no doubt will, receive the closest consideration. Briefly,

the French delegation has proposed little in the way of a reduction of present total armaments but a great deal in the way of transferring what are now national armaments to the control of the League of Nations. Civil aviation is to be internationalized, all bombing machines over a certain size and all long range artillery are to be handed over to the League which will maintain and control an International Force ; nations will only be allowed to keep capital ships, submarines over a certain tonnage, tanks, and medium sized military aeroplanes on condition that they agree to place them unreservedly at the League's disposal when called upon : and certain states will maintain naval, military and air forces ear-marked to proceed at once to the assistance of any country the victim of aggression by another. In addition all states will agree to refrain from using gas, bacteria and air or artillery bombardment at more than a specified distance beyond the front line or coast.

On the whole these proposals are supported by the powers of the "Little Entente" and others interested in the maintenance of the present balance in Europe, while the defeated nations, inclined to see in the scheme the perpetuation of the Versailles Treaty are in opposition. There is indeed considerable danger that the French proposals may form the rock on which the Conference may split in two and founder.

While it is improbable that any general agreement will be reached on the French scheme or on any modification of it, there has been a surprising degree of unanimity on certain points. This arises from the universal desire on humane grounds to protect the civilian population from direct attack. Thus all nations have declared their willingness to abandon the use of gas and bacteria ; many are prepared to accept some limitation in heavy artillery, tanks and submarines ; and all are unanimous in desiring bounds to be set to air bombing. Indeed, bombardment from the air seems to have come in for more condemnation than any other form of warfare, and many nations, going much further than France are, like the Japanese and Italians, urging its total prohibition and, even as do the Germans, the entire abolition of military air services.

In India we are particularly interested in this question of air bombing as events on the Frontier in the last few years have led to its employment on many occasions. Indeed there has been in Bajaur

within the last few weeks a very clear example of power to deal with incipient trouble. Whether it is as ethically objectionable to bomb a Frontier village as it is to bomb a great European city is debatable, but if, as a result of the Geneva Conference, the bombing of non-military objectives is prohibited, India in the control of her turbulent border-land will be deprived of an unquestionably powerful weapon. In view of this the attitude of the India Delegation to the Conference is of interest. H. H. the Aga Khan, speaking on its behalf said, ".. .. .. .. we will co-operate to the full in devising means for protecting the civil population against ruthless methods of warfare. Thus we support such proposals as that for the total abolition of the submarine, and of lethal gas and bacteriological warfare and the use of poison generally. Again we will pay special attention to any suggestions for limiting the destructive power of air bombardment ....."

The Conference has wisely decided, in spite of the French attitude, to take the Draft Convention for the Limitation of Armaments already drawn up as the basis on which to work. An effort will be made to include in this Draft Convention the greatest common denominator of agreement on limitation that the nations have so far shown. In many ways the amount of this agreement, based on the universal inclination to limit in some way the weapons most likely to be used against the civil population, has been remarkable. Even if the Conference does not produce some comprehensive disarmament scheme acceptable to all, it is not unlikely that it may lead to very considerable reductions in certain arms of every service, both in numbers and in freedom of use.

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The Far East.

It is more than incongruous that while the Disarmament Conference is sitting at Geneva two members of the League Council should for all practical purposes be at war. The provocation the Japanese have received has undoubtedly been great and has been aggravated by the difficulty of dealing with a Government, which, like the Chinese, has little real control within its own borders. Attacks on their nationals and the boycott of their trade have proved too great a strain for Japanese patience. The British have had so much similar experience themselves in India and in China that we can understand the Japanese attitude possibly better than most nations; indeed, at times some of us feel a tinge of envy for a Government that is so ready to grasp the bull by the horns.

The fierce anti-British agitation and boycott that took place in China a few years ago had none of the justification that might be urged against Japan, yet the way we met it was in startling contrast to Japan's action to day*. Which method will pay best in the long run remains to be seen. Probably, as usual, the ideal lies between the two—something a little stiffer than the British practice of turning the other cheek, a little less drastic than the Japanese invasion. There is, however, one important distinction between Japan and ourselves or any other Power with interests in China. The Japanese, with practically the rest of the world closed to their exploitation and colonization, must maintain their special position in Manchuria if they are to continue to exist as a great nation. They have poured out blood and treasure to achieve this position and the great development that has taken place in Manchuria during the last twenty-five years has been almost entirely due to their energy and to the comparative peace their presence has brought to the country. It is no exaggeration to say that they cannot abandon Manchuria without committing suicide, and this fact must be remembered if anything approaching a true realization of their attitude is to be reached.

In Shanghai there can be no doubt that the Japanese exceeded all reasonable requirements of security for their interests, and as a result they have sacrificed the sympathy of the world. It is unlikely that they intended their operations there to assume the proportions that they eventually did, but once committed national pride and military prestige compelled them to continue and to reinforce. As far as foreign observers can judge, the Japanese General Staff underestimated the delaying power of machine guns and barbed wire, and overlooked the fact that a highly trained mobile force sacrifices many of its advantages if it engages an inferior but numerically stronger enemy in street fighting or in very close country. Unlike most European armies the Japanese did not spend the years 1914 to 1918 butting against wired-in machine guns, and it is not surprising that the stubborn defence of the Chinese, so different from that encountered in the open warfare with Manchurian bandits, should have come as a shock.

However, superior discipline, training, and armamant, combined with the traditional courage of the Japanese soldier, have sufficed to overcome these difficulties, and the Chinese have been driven back

* See "The Hankow Incident," page 177.

beyond the twenty kilometre zone from Shanghai. There can be little doubt that if the Japanese wish, this process of driving back can be continued indefinitely. There is nothing in China that could stand up for long against a Japanese Expeditionary Force. However, honour is now satisfied and there is reason to believe that the withdrawal of Japanese troops already commenced will continue.

Whether it was Japan's deliberate intention or not, the world's interest has been concentrated on Shanghai to the neglect of Manchuria. Now Japan's position in Shanghai is very much on a level with that of other Powers, and she can withdraw her forces without abandoning anything she really wants, and as a very effective 'gesture.' In Manchuria, on the other hand, her interests are more vital and Japan must be well contented to see the other Powers occupied with the Shanghai dispute while the "independent" new Manchurian state consolidates its position.

One aspect of the extension of Japanese occupation in Manchuria is of great interest. In extending their hold on the arteries of communication Japanese forces have occupied Harbin, and through Harbin passes the Russian-owned Chinese Eastern Railway which provides the direct route from Russia to Vladivostok. The Soviet Government has not sprung to arms, it has not made even a serious diplomatic protest. Why ?

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A Dry Ration for Indian Troops.

Recent events on the Frontier and in Burma, which have entailed the employment of small columns moving so rapidly as often to have little time for cooking, have again emphasised the necessity for some form of "dry" rations for Indian troops. The stale *chupatti*, cooked many hours or even days previously which is normally all that can be provided for a haversack ration, is not only a tax on the most hardy digestion, but, when it becomes sour, as it often does in hot weather, is a positive danger to health. In addition the Army in India in now straining after an increased degree of mobility and to achieve this a very drastic pruning of many things up to now considered almost essential will be necessary. Amongst these, for columns operating at a reduced scale for short periods, may well be cooking pots and fuel—always a bulky article. An adequate and economical 'dry' ration acceptable to all classes of Indian troops has thus, for the double reasons of health and mobility, become a real necessity.

Why not biscuits? Many sepoys would undoubtedly welcome an issue of biscuits similar to those given to British troops. True, the Indian soldier is unaccustomed to this type of food, but officers will recall how readily sepoys ate ration biscuits when the need arose during the War, and they would probably do so again with relish in similar circumstances. The supply of ration biscuits, however, raises many issues. If biscuits are to be made an authorised rather than an optional ration, careful arrangements for manufacture are necessary in order to overcome caste prejudices. Even with the utmost care in preparation, biscuits might be regarded with suspicion by a minority, and any attempt to force an unpopular ration on Indian troops is so unwise as to be mad. On this ground alone the issue of factory manufactured biscuits contains the germs of danger. Then too the holding of expensive stocks in peace would become necessay to provide reserves for War, and this again entails the periodical issue of biscuits in peace to ensure a "turnover," a measure that is unlikely to be greeted with enthusiasm in the lines.

In consequence, recent experiments to discover some suitable form of "dry" ration for operations on a hard scale have tended towards the production of an easily portable article of diet, which can be readily prepared by the troops themselves, and which will remain in an edible condition for some days. These experiments have been quite distinct from any attempts to solve the problem of emergency rations, which is a different question altogether.

There exists, amongst the scales of rations admissible to Indian Troops, one for train rations on rail journeys when cooking facilities or halts cannot be arranged. This scale provides for the preparation of what is known as "Shakapara Paste," which consists of normal items of the daily ration such as *atta, gur, ghi*, and salt, but in slightly different proportions from the standard scale. It has been found that, with the addition of a greater proportion of *ghi*, biscuits, either sweet or salty, can be made up from this paste and remain edible for as many as fifteen days. Preliminary experiments with the paste have shown that it is possible to draw up a scale which gives the adequate number of calories for a sustaining ration in a reasonably palatable form. This scale also includes sufficient tea, sugar and milk to enable each man to have at least one dish of hot, sweet tea in twenty-four hours. Further and more extensive trials by troops themselves are shortly to take place in order to determine whether the ration is acceptable

to all classes, and to ascertain its value for the purpose for which it is intended. For this type of biscuit there is no question of holding stocks as it is made from the standard ration. The unit cooks prepare it themselves so that no difficulties on account of caste susceptibilities can arise. The only drawback is that a few hours warning of requirements must be given.

The near future may, therefore, see the provision of the long and urgently needed "dry" ration, which will increase the endurance of the Indian soldier and ensure that the stomach on which he marches is a full one.

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The New Light Machine Gun.

Exactly a year ago there appeared a paragraph in the Editorial of this Journal urging replacement of the obsolete Lewis gun by a more modern weapon. At that time it was pointed out that, while several very promising types of light machine guns were on the market, finance was the real obstacle, for to carry out trials, re-equip the Army in India, provide reserves, and organise factory production would cost very large sums. Since then the Army Budget has been reduced by some 5¼ crores and very cogent reasons could be produced for a general postponement of any re-armament scheme. It is all the more to the credit of those concerned that the search for the ideal light machine gun and for the ways and means of re-equipping with it the Army in India has continued. Progress has possibly not been as rapid as those condemned to rely on the Lewis gun could wish, but there are advantages in deliberation in such matters, and progress, while slow, has been continuous.

The first step, the selection of the new weapon, has now reached the stage that, out of the several light machine guns tested, one has proved sufficiently satisfactory to justify extensive trials with troops. These trials will commence very shortly in cavalry regiments both at Home and in India. Since the abolition of the Hotchkiss gun it has been generally recognised that cavalry have been lacking in fire power, and it is probable, therefore, that they will have first claim to the new automatic, should it fulfil the promise it has already shown. After them, the Lewis guns of infantry battalions would be replaced and, finally, the question of substituting the new gun for the Vickers would have to be settled. It is perhaps a little early to discuss this, but it is obvious that an air-cooled gun—and it must be air-cooled to ensure lightness—will almost certainly fall short of the Vickers in its volume of prolonged fire. Indications are that the advantages of one weapon

in the place of two in training and supply, especially in war, would justify a somewhat lower performance in sustained fire.

Further trials must, if they are to be of real value, take time. Even when the new weapon is passed as fit for issue, re-equipment will for financial reasons be a gradual business, but there is at last justification for the belief that the days of the Lewis gun are numbered.

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GOLD MEDAL PRIZE ESSAY COMPETITION, 1932.

The Council has chosen the following subjects for the Gold Medal Prize Essay Competition for 1932 :—

" Disarmament, and its effect on the Foreign Policy of British Empire."

The following are the conditions of the competition :—

(1) The competition is open to all gazetted officers of the Civil Administration, the Royal Navy, Army, Royal Air Force and Auxiliary Forces.

(2) Essay must be type-written and submitted in triplicate.

(3) When reference is made to any work, the title of such work is to be quoted.

(4) Essays are to be strictly anonymous. Each must have a motto, and, enclosed with the essay, there should be sent a sealed envelope with the motto written on the outside and the name of the competitor inside.

(5) Essays will not be accepted unless received by the Secretary on or before the 30th June 1932.

(6) Essays will be submitted for adjudication to three judges, chosen by the Council. The Judges may recommend a money award, not exceeding Rs. 150, either in addition to or in substitution for the medal. The decision of the three judges will be submitted to the Council, who will decide whether the medal is to be awarded and whether the essay is to be published.

(7) The name of the successful candidate will be announced at a Council Meeting to be held in September or October 1932.

(8) All essays submitted are to become the property of the United Service Institution of India absolutely, and authors will not be at liberty to make any use whatsoever of their essays without the sanction of the Council.

(9) Essays should not exceed 15 pages of the size and style of the Journal, exclusive of any appendices, tables or maps.

THE BURMESE REBELLION 1931.

" Steal gold from the Pagodas, fine, bright gold. Refine it in the fire and repeat the magic words in the house, on the lonely path, before the lucky star, at the pagodas ; repeat them a thousand times save one. Consecrate the water ; draw the circle of the flying galon. Put it under the left arm. No harm will befall thee, safe and invulnerable."—Burmese Charm.

Burma is outside the orbit of the majority of units in India, and the news that armed rebellion had broken out in December 1930 came as a surprise to most people,—almost as big a surprise as it was to the Civil Administration of the Province. For some years past the country had appeared quiet enough, and there had grown up a feeling of false security. The large towns were adequately policed and crime was detected and punished with a firm hand, but only a few officials knew and appreciated what was going on in the remote jungles and country districts far from roads and communications. Climate, physical features, bad communications were all against that maintenance of personal touch which has been so beneficial in Districts in India.

The Rebellion of 1931 differed greatly from the last armed rebellion in India, the Moplah Rebellion of 1921, in that it lacked any communal feature. Burmans are Buddhists, completely free from caste, and there is no dissension amongst them caused by religious beliefs. Herein lay the danger of the Rebellion—once thoroughly roused the people of Lower Burma could fight unhampered by inter-religious disturbances and conflicts. Fortunately (from the point of view of those responsible for restoring law and order) Burmans are pleasure-loving and generally averse from work. Their belief in witchcraft and spells is just as strong to-day as it was in the time of King Thibaw and during the Rebellion no dacoities of any kind could be considered unless the occasion had been proved suspicious. Saya San, the original, and probably the greatest rebel leader, was a quack doctor by profession, who carried with him a pair of bellows in order that he might pursue his studies in alchemy when not engaged in other less peaceful pursuits.

Like many other Eastern lands Burma is priest-ridden, and the country-side swarms with *Pongyis*, with their begging bowls and saffron coloured robes. Every male Burman has to serve a period of his life as a *Pongyi*, and this peculiar form of conscription leads to a large itinerant population which has to be fed by the already stricken cultivator. The *Pongyis* wield immense power among the superstitious and simple-minded villagers, and, from a military point of view, are unequalled as propagandists and disseminators of intelligence.

The Origin of the Rebellion.

Opinion is divided as to whether the Rebellion was the result of economic depression or whether politics were the *prima causa*. Both certainly contributed, but the trouble was deep-rooted and no one factor can be held primarily responsible.

As is usual in outbreaks of this nature, there was an evil genius behind the scenes in the person of Rash Behari Bhose, Bengali, a revolutionary, who had fled from India to Japan many years ago. A slightly lesser light was U. Oktama, a Burmese extremist and revolutionary monk, who, after undergoing three years rigorous imprisonment, went to Japan in 1928 and there came in contact with Rash Behari Bhose. Oktama was an earnest student of revolutionary methods, and, on return to India in December 1929, spent six months in French Chandernagore, the Headquarters of the Bengal Revolutionary Party.

The Congress Party in India did not neglect Burma, and it gradually obtained control of the majority of those Burmese Councils which were of a political nature, including the Grand Council of Burmese Associations (G. C. B. A.).

Soe Thein was the original head of the G. C. B. A., but Saya San gradually usurped his position. Saya San appealed mainly to the credulity, ignorance and superstition of the peasantry, and it was he who proclaimed himself "King of the Galons," and founded the "Galon Army." Burmans are extremely fond of tattooing, and we find each man in his army tattooed either with the word "Galon," or with a representation of the bird itself. The *galon* or *garuda* of Hindu Mythology is the legendary *roc* which destroys the *naga* or dragon. As the *naga* is the emblem of the foreigner, success would be assured by virtue of the symbol of victory tattooed on every rebel.

At first Congress did not concern itself with the future of Burma, but when the question of separation was mooted it suddenly began to take a very lively interest. One can quite understand its attitude—there were large vested Indian interests in Burma, it was a source of employment for thousands of Indian coolies, and many Indians were in Government service. All these benefits might well be jeopardized should separation become an accomplished fact, and non-separation became of paramount importance. Congress immediately started organizing industrial trouble, culminating in the Rangoon riots of May 1930, and began to enlist the sympathies of the non-separation school. Attempts were also made to stir up feeling against Indians, Chinese and Europeans. The country was almost ripe for rebellion when, in July 1930, Oktama returned to Burma at the invitation of the Congress Party and the G. C. B. A. He had kept in close touch with Saya San even since his return from Japan, and his arrival in Burma as chief controller of anti-Government activities was marked by renewed and stronger effort. Oktama's plan was to initiate simultaneous risings all over the country so that troops and military police could not be concentrated in any one area. Fortunately the plan miscarried, as a premature rising occurred in the notorious Tharrawaddy District on 22nd December 1930 on the occasion of the Governor's visit, and before Oktama was ready. He thereupon decided to leave Burma, but continued to act in a kind of advisory capacity from India. As might be expected Oktama enjoyed the sympathy of the British Communist Party, and he was on very friendly terms with one Bernard Houghton, who, when the separation question was being finally discussed at the first Round Table Conference, wired to him the now famous message—"*Macdonald shuffling, urge mass demonstration.*"

Reference has already been made to the *Pongyis*, and a large number undoubtedly were deeply involved in the Rebellion. Many of them, known as "coupon preachers," belonged to the Grand Council of Sangha Sametgis (G. C. S. S.), the religious branch of the G. C.B.A. All classes of agriculturists suffered from the rapid fall in the price of paddy in 1930, and they lent a ready ear to the preaching of seditious *pongyis* who took advantage of the political ferment of the previous two years. Closely allied to the factor of agricultural depression was the rising tide of Burmese nationalism, which developed into a dislike of so-called foreign domination. The Rangoon riots were con-

sidered as a victory for the Burmans, and one can understand why a charlatan like Saya San had such amazing success as a Pretender to the throne. This national feeling, fostered by economic causes, has led to a hatred of Indians. At one time the average Burman was content to live side by side with the Indian immigrant, but conditions have changed. The Indian with a lower standard of living, has become domiciled and the ubiquitous Indian money-lender has obtained a firm footing. Economic pressure has therefore forced the lazy Burman to undertake more cooly work and to enter into competition with the Indian labourer, and he is very often in the toils of the money-lender, who holds his land in mortgage. The Englishman was held responsible for the disastrous fall in the price of paddy, and he was to be driven out of Burma together with the Indian. These economic factors and the hated Capitation Tax, provided a number of texts for the *pongyis* and it is not to be wondered at that the superstitious Burman, proud of his race, gave a hearty response.

The Area of Operations.

(See Map 1.)

As the Rebellion scarcely affected the Northern Hill Districts, it will be sufficient for our purpose generally to consider what is usually called Southern Burma, and one cannot do better than to quote from the Military Report, which says—"Speaking generally the whole of Southern Burma may be regarded as one vast military obstacle especially when travelling from east to west or *vice versa*. It is a country of mountain ranges running north and south, separated by broad plains through which the river valleys run. The plains are usually swampy, and, for a large portion of the year, except for the main roads, are impassable for wheeled transport on account of large irrigated rice areas and extensive tracts of thick jungle."

Southern Burma falls naturally into two zones—the "dry" and the "wet," and a rough line of demarcation can be considered as coincident with the southern limits of Prome District. June—October is the rainy season, and it is usually extremely unhealthy for troops, but in 1931 the incidence of sick was noticeably low.

About ten years ago there was considerable outcry about the backward state of communications, as up to that time the only through communication was by river or rail. Apart from expense, the Burmese

Government did not consider a network of reliable roads necessary as in the dry weather, from December to March, the empty paddy fields are baked hard by the sun and free movement is quite easy, but during the rains they become impassable for wheels of any description. A Road Board was subsequently formed and a large improvement programme initiated which provided for trunk roads and local projects. There are now two trunk roads, one following the line of the railway from Rangoon to Mandalay, and the other from Rangoon through Prome to Allanmyo, which may eventually be extended to Mandalay. Only part of the latter is tarred, and owing to a decision by Audit Authorities the untarred portion will probably wear out very quickly. They have ruled that tarring is a "new work," not a "repair" or "maintenance," and unfortunately there is no more money available under that Head.

"Local project" roads generally speaking, radiate from each District Headquarters, but having been built as cheaply as possible along the old cart roads with their weak wooden bridges, they are not reliable for continuous motor transport traffic. The old military roads, such as the Thayetmyo—Mindon road had been allowed to deteriorate, but it was found possible to open them up and maintain them during the rains. A final class of road is the country cart-track with ruts up to three feet deep. In the "dry" zone these are often passable by motor transport throughout the year, but in the "wet" zone they are entirely impracticable.

The Course of the Rebellion.

Operations fall conveniently into two phases—the first, from December 1930 to June 1931, and the second, from June 1931 onwards when reinforcements from India were used.

December 1930—*June* 1931.

When the Rebellion broke out the available armed forces were :—

Civil.—Two Battalions of Military Police.

Military.—Two Battalions of British Infantry (Rangoon and Mandalay).

Two Battalions Burma Rifles (Maymyo and Mandalay).

One Battalion of Indian Infantry (Mingaladon).

One Battalion Indian Pioneers
One Field Company Sappers and Miners } Mandalay.
One Mountain Battery

The Military Police Act of 1888 created a Military Police Force in Lower Burma, and incorporated it with the Upper Burma Force, but their rôles differed. Whereas the latter was constituted to support and relieve the regular forces, the former was required to assist the civil police in dealing with lawlessness on an unusual scale. In 1924 the Lower Burma Force was reduced to two Battalions nominally stationed at Rangoon and Mandalay. Their strengths were respectively 2,200 and 1,522, but, owing to dispersion among numerous stations, the actual reserves on the outbreak of the Rebellion were 176 at Rangoon and 94 at Mandalay. This dispersion was a serious handicap to the Civil Authorities, who experienced great difficulty in concentrating sufficient armed forces in any particular area, and they had to ask for military support on several occasions. Events showed that the 1924 reductions had been too drastic, and by June 1931 five new Battalions of Military Police had been raised, while five others were in process of being recruited.

Apart from the scarcity of armed reserves and bad communications, the Civil Authorities had other serious difficulties to contend with. The rebels were organized in bands which hid in the jungles, or when hard pressed, slipped away into the hills. It was not a question of dealing with organized resistance on a large scale, but rather with countless small gangs whose intelligence system was perfect, while the police had great difficulty in obtaining any reliable information, even loyal villagers being afraid of reporting the movement of dacoits. "Intelligence" had an important bearing on operations, and although steps were ultimately taken to organize a workable system, it was tremendously hampered by the nature of the country, the fear of the inhabitants and, at first, by a total lack of Intelligence Security. Gossip in clubs was repeated by servants, and on one occasion a rebel was discovered working in a Deputy Commissioner's office. Telegraphists, railway and postal employees were all implicated in passing information to rebel leaders.

Soon after the Rebellion broke out the civil police proved unable to stand the strain, and military police had to relieve them in purely static police duties. When the 2/15th Punjab Regiment and the two Battalions of Burma Rifles were called out they too were expected to supplement the police and were dispersed in small detachments at places selected by the Civil Authorities. Even the first units from

India were used purely for defence, and the local military commanders found their hands completely tied, with resulting discord between the two authorities when there should have been complete co-operation. It must be remembered that throughout the operations the military were in aid of the Civil Power, and it is not reasonable to expect civil officers to understand and apply military tactics, but it was not the first time that the Army in India has had to perform this unpleasant duty and a *modus vivendi* might have been more rapidly found.

Even in old Burmese times Tharrawaddy had an evil reputation as a criminal and restless district, and in recent years it had become the favourite resort of political agitators. Two months before the Rebellion broke out men were enlisted, tattooed, and sent back to their homes to wait until called up, without any official being aware of the fact. The outbreak was thus a complete surprise. The first night two headmen and a Deputy Ranger of Forests were killed, several villages were raided and guns stolen. Later a Forest Engineer, Mr. Fields-Clarke, was killed and the Rebellion showed signs of getting out of hand. No more Military Police were available, military assistance was asked for, and arrived in the district by the 28th December. By this time the rebels were estimated at between 1,200 and 1,500, and they were believed to have looted 30 guns, a few rifles, and considerable quantities of ammunition. Saya San was proved to be the leader, but he eluded all attempts to capture him—his intelligence was too good. Operations drifted on with occasional unproductive drives and the rising spread into the neighbouring district of Insein. The position was reviewed in the middle of February; the Civil Authorities, however, came to the conclusion that the problem was still one for the police rather than for the military. Subsequent events proved this decision to be wrong. Be that as it may, Tharrawaddy was divided into squares, each of which had a police garrison, and Imperial troops were left at certain towns to maintain confidence among the people and to act as striking forces wherever required. Early in February the G. C. B. A. and its affiliated societies were declared unlawful, liberal rewards were offered for the capture of *Bohs* (Leaders), and the situation appeared to be well in hand.

It will be remembered that Oktama had made plans for risings all over the country, and the outbreak in Tharrawaddy was soon

followed by others in Yamethin, Pyapon, Henzada and Bassein. In every case the rebels split up into bands of dacoits and although the civil and military police were reinforced they were too weak to round them up.

In April trouble began to spread further north and it suddenly blazed out in Thayetmyo District. Military and civil reinforcements were rushed to the area and it is claimed that they inflicted considerable casualties on the rebels. The Civil Authorities hoped that "the crushing defeat" would cause the Rebellion to collapse, but shortly afterwards they had to admit that the district was still in a very disturbed condition. As a matter of fact the situation had seriously deteriorated, and in May, all districts with the exception of Pyapon, were in a state of unrest. Rebel gangs were still at large and an orgy of dacoities had begun. Communal feeling against Indians was increasing and it was feared that the rains would drive the bands further north into the "dry" zone and Upper Burma.

Such was the state of affairs when the Local Government decided to appeal to the Government of India for help. At first they asked for one Infantry Battalion, and then for another, but they evidently miscalculated the magnitude of the task before them, as eventually six battalions were sent.

The confession of a surrendered rebel throws a light on the methods used by these dacoit gangs. Apparently the recruits were little aware of what the future had in store for them, but each *Boh* wielded such power over his gang that they soon learnt the rudiments of discipline. They lived on the country, and the terror-stricken villagers would do anything to escape the wrath of their unwelcome guests. Arms and ammunition were in the greatest demand, and many an unfortunate headman lost his life because he was the possessor of a match-lock. After raiding a village, a gang rarely had any difficulty in slipping away into the depths of the jungle and hiding there, until the police party had withdrawn. Murders were frequent, and in some cases entirely unprovoked, as is revealed by the following extract from a captured rebel's story :—"There we saw an aged Karen woman passing in front of our party. San Kyu shot the woman, as he was ordered to do so by *Boh* San Htu who considered it a bad omen to allow a woman to pass in front of our *Tat* (band)."

Looted oilfield stores in the disturbed areas provided the rebels with $\frac{3}{4}$" piping which they skilfully made into gun barrels, and crude cannon were made from oil pipes and metal telegraph poles. These however were only effective up to about 100 yards. Home-made ammunition and bombs were produced, but they were extremely unreliable as the rebels sometimes discovered to their own discomfort. In the latter months of 1931 munitions of war ran short, and some of the expedients adopted are rather interesting. Ammunition was precious, so ordinary crackers were made up and used for scaring villagers. Match heads became a popular powder when the supply of cartridges failed, and a rebel prisoner stated that 1,200 boxes of matches were used to load one gun which was fired during the Sitsiyan raid. The Manager of a Swedish match firm also testified to the extraordinary number of matches which were being sold in rebel areas.

June 1931 *Onwards.*

The 1/17th Dogra Regiment left India for Burma on 10th May, but as the Local Government still appeared to be undecided as to the amount of support required, the Government of India arranged for the despatch of a further Brigade, and Headquarters 12th (Secunderabad) Infantry Brigade and the 3/16th Punjab Regiment sailed on 27th May, followed early in June by the Manchester Regiment, 3/10th Baluch Regiment, Signals and ancillary units.

The 1/17th Dogra Regiment and the 3/16th Punjab Regiment duly arrived in Burma and the Civil Authorities began to employ them, but there does not appear to have been any concerted plan, and the liaison between civil and military left much to be desired. Information was still very difficult to obtain, and when it did arrive it was usually too late to be of much value.

June was a particularly bad month and conditions generally were thoroughly unsatisfactory. In Thayetmyo dacoity was rife and unchecked, and there were signs of the Rebellion spreading further north. A no-tax campaign had been started in Upper Chindwin and the crime returns, always a clear indication of the state of affairs, had reached an alarming figure. On 12th June 40 prisoners escaped from Nyaunglebin sub-jail in Pegu District and succeeded in making away with 20 police muskets, 6 shot guns, and 800 rounds of ammunition.

There were numerous signs that the Rebellion was getting completely out of hand, and the peasantry must have thought that the British Raj was becoming impotent. A Deputy Commissioner expressed the view that the attitude of most of the population in his District was one of semi-malevolent neutrality.

One bright spot in an otherwise very gloomy month was the fine performance put up by a weak platoon, 23 strong, of the 2/15th Punjab Regiment at Wetto (near Paukkaung in Prome District). Besides being in keeping with the traditions of the Indian Army, it proved to the rebels, and incidentally to the wavering villagers, that the British Raj was still far from being a spent force. For some days this platoon, commanded by a British Officer, had been working hard in following up Boh Pe and his gang. It proved to be a heart-breaking task, guides were unreliable, information was indifferent and repeatedly the platoon arrived at a village just in time to hear that Boh Pe had slipped away. But the chase went on, and one morning, after a night march, the Platoon arrived at Paukkaung only to hear that Boh Pe was at Wetto. A fresh guide was found who volunteered to lead the way. Boh Pe had accurate news of his pursuers, and this time he decided to stand his ground. It was an opportunity for increasing his prestige, and with a force of nearly four hundred rebels, all invulnerable, he expected to be successful. As the platoon advanced, Boh Pe's gang rushed it and the situation became critical. Rifle fire was ineffective against such numbers, but the Lewis Gun Section was too much for the rebels, and although they showed great courage, they were routed, losing over a hundred killed and wounded.

All units of the 12th Infantry Brigade had arrived during June, and it was then possible to divide Lower Burma into two Brigade areas. Thus for the first time since the Rebellion began, an attempt was made to organize the theatre of operations on what might be termed a sound military basis. If the Local Government entertained hopes of a rapid improvement in the situation after the arrival of reinforcements they were disappointed; July showed very little change in the situation. It was perhaps too early to judge, but Saya San was touring and ensuring that there was no flagging among the rebels. Their morale was high and fears were entertained that a spectacular success would lead to a rapid spread of the Rebellion and encourage the bands of dacoits to concentrate. About this time it was noticed that the rebels were relying,

more on charms and handkerchiefs than on tattooing. One prisoner naively said that whereas charms can be thrown away, tattooing is permanent and sees a man into gaol.

July proved to be just as unsatisfactory as June had been, despite the fact that the 2/5th Mahratta Light Infantry and the 3/6th Rajputana Rifles arrived early in the month. But forces were beginning to work which led to an overhauling of our methods, with the result that the Rebellion was eventually crushed in a shorter time than even the most optimistic observer could have foretold. The Local Government were not at all happy with the state of affairs, and the military authorities were forced to protest against a system which in their view violated all principles, both of war and of the correct employment of "Troops in aid of the Civil Power." They held that "dual control" meant neither one thing nor another; owing to undue dispersion they felt that unnecessary risks were being taken, and they objected to the employment of military forces to relieve civil police of their ordinary duties, leaving only a portion of the troops to carry out real operations. Accordingly the Governor held a Conference of responsible civil and military officers at Rangoon on 27th July. A satisfactory settlement was reached. It was decided that the Civil Administration should remain supreme, but that troops and military police should be under military command. This principle was incorporated in a formula defining the responsibilities of the Deputy Commissioner and the local military commander in each District. (See Map 2). These officers were urged to maintain the closest liaison, and in other words, to try and see the other man's point of view. Having come to an agreement with the Local Government, the Military Authorities were in a position to set their own house in order, which they immediately did. Additional Staff Officers were sent out, signal systems were co-ordinated, a special Military Intelligence Branch was formed, and a road policy initiated.

A grip having been taken of the situation, everything began to work far more smoothly, and individuals felt that at last their efforts were being fitted in to a comprehensive plan which had every chance of success. The Burmese Emergency Powers Ordinance with very wide powers was promulgated on the 1st of August, and the Military Command on their part initiated a plan of operations. Brigade Commanders reviewed the situation, and produced schemes for dealing with the Rebellion

in their own areas. This belated but whole-hearted co-operation on the part of Civil and Military authorities was indeed refreshing after the disappointments and mistakes of the previous seven months, and the future promised well. At one time there was doubt as to whether operations could be successfully carried out in the mud of the Southern Districts where the rains had broken, but events proved that offensive operations were quite feasible. As so very often happens in "small wars" units found that some part of their equipment had to be discarded as unsuitable for local conditions. In this case Vickers guns were proved to be useless, and two extra rifle platoons were formed from the men in the Company. One Battalion even improvised mounted infantry which played a very useful part from its Machine Gun Company.

During this period when the fortunes of the Local Government showed signs of improvement the rebels suffered a severe blow in the capture of Saya San. For some time past he had been trying to stir up trouble in the Shan States, but with only partial success. The Burma Military Police quickly suppressed a small rising and eventually caught the absconding leader, U. Nyanna, who to everyone's joy was found to be no other than Saya San. His place was taken by one Myat Aung a skilful and resourceful leader.

In August the military plans began to take effect and a systematic and relentless pressure was maintained on rebel gangs. This alteration in the handling of the situation was not lost on the villagers, and by the end of the month they were beginning to believe that Government could and would protect them. Not content with armed effort, Government widened its sphere of activity and started a propaganda department, which kept the press informed of what was going on and published pamphlets and pictures. Certain religious leaders were persuaded to tour with a view to pointing out to the peasantry the error of their ways, and villages outside the disaffected areas were given demonstrations of Lewis gun and rifle fire as proof of what they might expect if they should decide to join the rebels. All this effort met with its reward as slowly but surely the situation improved. Early in September reports were received that the villagers were beginning to offer resistance to rebel gangs, and a still more hopeful sign was the fact that the civil police were regaining more control.

The rebels offered a stout-hearted defence to this increased Government activity, and there were indications that the more important leaders in various Districts were beginning to act on a roughly concerted plan. They tried hard to revive interest by means of proclamations and slogans, and funds were collected for an extension of the Rebellion, Prome District alone contributing over Rs. 21,000. But their plans were frustrated by the energies of mobile columns which harried the rebels in every District. This went on despite occasional setbacks, throughout September and October, until eventually on the 6th of November the General Officer Commanding was able to report that for the first time the Government forces had attained the initiative. Valuable assistance was given to the military by irregulars. They were organized into " packs " and each one was put on the track of a rebel leader with instructions to hunt him and his gang to a standstill.

It is not possible to give an account of the excellent work done by all these columns of troops and Burma Military Police, who, in spite of the bad climate and numerous disappointments, never once lost heart or failed to respond to the demands made upon them, but the action of the 2/5th Mahratta Light Infantry at Thayetkon may be taken as a typical example of a well executed raid.

On the afternoon of 24th October the Commander of the Prome Area received a code wire from the Police at Paungde that a party of rebels had been located in the " Kyaung " (monastery) at Thyetkon. This was an opportunity not to be missed, and he decided to round them up, but from bitter experience the Commander knew that unless he acted with the greatest secrecy and caution his chances of success would be slight. The first essential was to conceal his destination, even from the troops themselves, and to this end he thought out a very ingenious plan. Fortunately the Station Master at Prome was able to co-operate and arrangements were made to entrain two Platoons (including two Lewis Sections) after dark at a little-used siding about half a mile from the station. After a quick and silent entrainment the doors were locked, the shutters drawn, and there was no outward sign that the carriages, which were eventually attached to the Down Mail Train were full of troops. To complete the deception the two British Officers, wearing mufti, travelled in an ordinary 1st Class compartment. The Mail duly arrived at Paungde and the special carriages were.

slipped and put in a siding where they remained, still shuttered down. Here the plan was disclosed and carefully explained to each Platoon separately so that every man should know exactly the part he had to play.

The gist of the orders was that the Column would make a detour, and, approaching the village from the north-east, would surround the monastery. The first phase included the movements of the Lewis Gun Sections who were allotted to the north and east sides, and the completion of the cordon by the rifle sections to the south and west. The second phase envisaged the capture of the rebels and the search of the Kyaung at dawn. Firing was prohibited once the building had been surrounded owing to the danger of sections hitting each other in the poor light.

After orders had been thoroughly digested the troops embussed at the Railway Station, and the Column, accompanied by a Police official and twenty armed Police, left Paungde at 22·30 hours *en route* for Pauktaw *via* Hmattaing. Pauktaw was reached after an hour's run, and the critical stage of the raid began—the approach march on foot. The route which lay through the Zibinhla Forest area was very difficult going—extremely dense jungle occasionally relieved by flooded paddy fields, but by 03-40 hours the Column arrived in a patch of jungle half a mile north of Thayetkon where a halt was called. The scheme and orders were repeated and the Police given their rôle. Then after a re-shuffling whereby the Lewis guns were placed in the lead, the advance was continued. By this time the moon was nearly full, and the men could see their way across the paddy fields. So far no alarm had been raised and there was every reason to believe that all would go well. Thayetkon is a narrow village about a thousand yards long running east and west, and the guide had intended to lead the way right round to the east end, but he miscalculated his position and took the Column through the village. There was no path and bamboo fences and hedges had to be negotiated, but, despite this unforeseen delay, the Column, well closed up, reached the north-west gate of the Kyaung at 04-03 hours. The Kyaung, which is a two-storied building raised some two feet off the ground stands in an enclosure thickly planted with banana trees (except on the south side where there is a garden containing two pagodas) and the whole is securely fenced.

The various sections immediately doubled off towards their positions, but by now the alarm had been given, a gong sounded and the rebels opened fire. They began to invoke the help of their charms and shouted " Tiger ! Tiger ! Miss ! Miss ! Let the bullets turn to water ! " But within a few minutes the building was surrounded and the sections replied with Lewis gun and rifle fire. One sepoy was hit in the foot, but the rebels' amulets proved unreliable and soon loud groans were heard from the lower storey. Sounds of rifle fire from the direction of the Police " stop " north of the village suddenly died down and the first phase was over.

At 04-12 hours the rebels made an attempt to escape, and under cover of bombs five broke out, but the troops opened fire again and they were all killed. Conditions in the enclosure were not ideal as the banana trees threw deep shadows and it was not easy to see what was happening, but in a few minutes orders were given to cease fire. At dawn the Police party began to search the Kyaung and as they ascended the stairs gunshots were heard. Apparently a party of rebels with three *bohs* were hiding on the roof, and when they refused to surrender they were immediately shot.

The casualties were then collected and, as far as possible, identified. There were fifteen killed and sixteen wounded and not a rebel had escaped. Four *bohs* were accounted for including three killed, and the price on their heads, amounting to Rs. 900, was a pleasant recompense for all the discomfort and hard work. The Mahrattas' casualties were one British officer and three sepoys wounded, and the Column returned to Prome after a very satisfactory and encouraging night's work.

The General Officer Commanding decided at the end of October on a determined effort to complete the defeat of the rebels, who as a result of the previous two months' operations, had again split up into bands and were difficult to round up. His plan, divided into two phases, was simple and aimed at driving them into the jungle area and isolating them there whilst " packs " of irregulars went in and hunted them. Experience had shown that the rebels were in the habit of raiding at intervals of about three days in order to replenish their food supplies, and it was hoped that constant patrolling of villages near the jungle together with the blocking of paths would bring great pressure to bear on them. These operations were estimated to last two months, which

proved to be approximately correct, and during December there were signs of a distinct return to law and order in all districts except Prome and Henzada. Henzada is a bad district, with a particularly lawless population which has been driven to crime by economic conditions extending over the last fifty years, and its garrison always had great difficulty in keeping level with the rebellion.

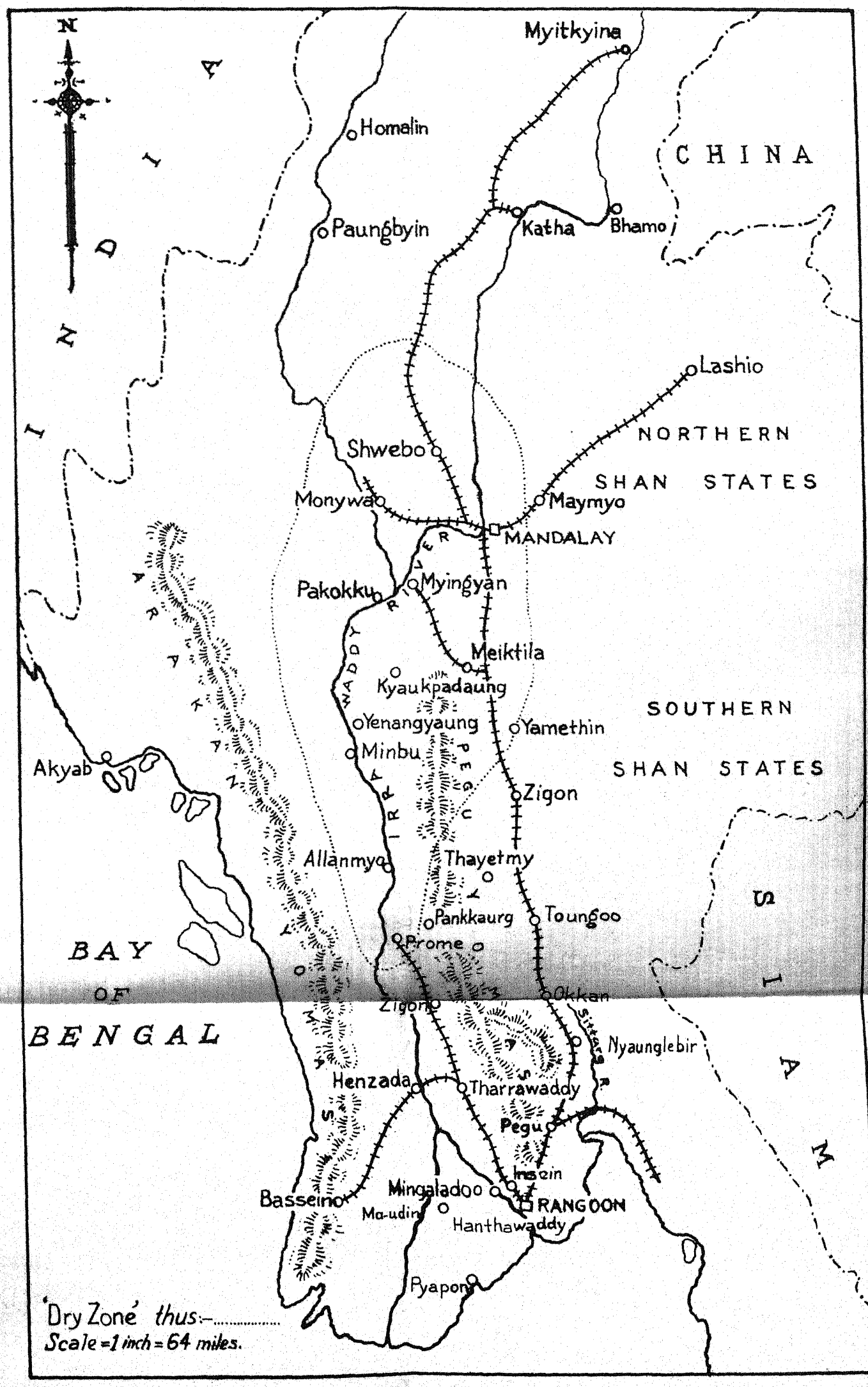
January is a critical month in Burma, as Capitation Tax is due to be paid, and the end of the paddy harvest usually leads to an increase in crime. The Local Government was rather apprehensive, but operations in November and December had been so effective that the population was heartily sick of the activity of the troops. Desertions from the rebel army increased and leaders themselves began to surrender with their gangs and arms. Conditions varied in districts, but, on the whole, there was every reason for satisfaction. Capitation Tax was being paid with reasonable promptitude and civil administration was showing signs of coming to life again. The rebellion was not quite crushed, however, as on January 6th a rising occurred in the Zigon sub-division of Tharrawaddy which had several disquieting features. The rebel plans had been maturing for two months without the slightest suspicion on the part of the authorities and immediately it broke out there was a cry for military support. Fortunately reinforcements were immediately available and a repetition of 22nd December, 1930, was avoided.

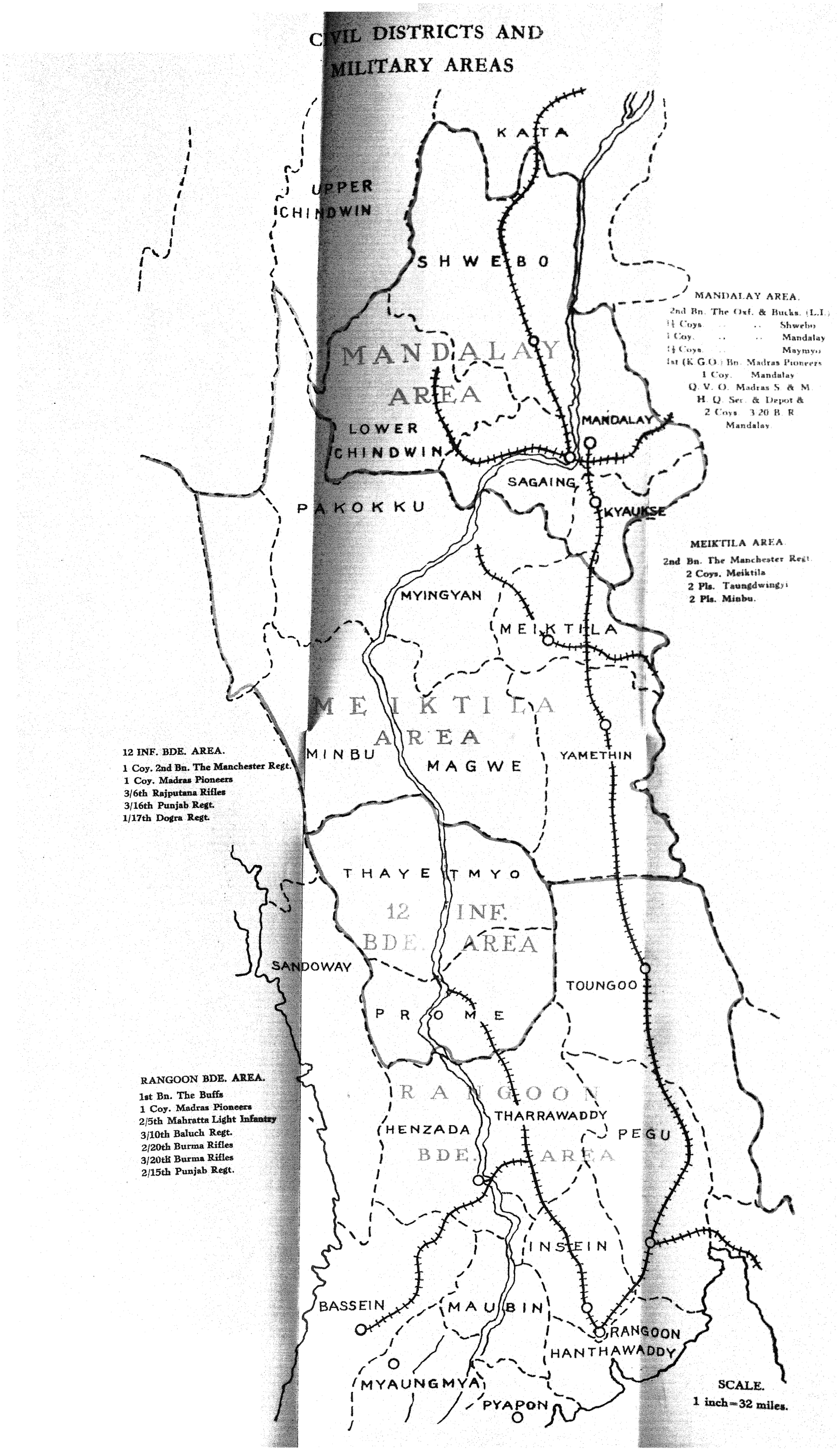
With the defeat of the Zigon rising the Rebellion was virtually at an end and arrangements were begun to enable the Civil authorities to resume their duties. Units were gradually concentrated in their Brigade areas, and their departure from many villages was the sign for entertainments and expressions of good-will. The Local Government agreed to the policy that after the surplus troops had been withdrawn, the garrison of Burma (temporarily strengthened by two Infantry Battalions) should be kept in reserve to be used only if the civil forces lost control. All civil authorities paid marked tributes of appreciation to the military units, and in February orders were issued for their final withdrawal.

The Future.

The departure of the Secunderabad Brigade does not by any means indicate that the trials and difficulties of the Burma Government are over. The civil administration has still a considerable amount of

SKETCH MAP of BURMA




CIVIL DISTRICTS AND
MILITARY AREAS
KATA
UPPER
CHINDWIN
SHWEBO
MANDALAY
AREA
LOWER
CHINDWIN
MANDALAY
SAGAING
KYAUKSE
PAKOKKU
MYINGYAN
MEIKTILA
MEIKTILA
AREA
MINBU
MAGWE
YAMETHIN
THAYETMYO
12 INF.
BDE. AREA
SANDOWAY
TOUNGOO
PROME
RANGOON
HENZADA
THARRAWADDY
PEGU
BDE. AREA
INSEIN
BASSEIN
MAUBIN
RANGOON
HANTHAWADDY
MYAUNGMYA
PYAPON
MANDALAY AREA.
2nd Bn. The Oxf. & Bucks. (L.I.)
1½ Coys. .. .. Shwebo
1 Coy. .. .. Mandalay
½ Coys. .. .. Maymyo
1st (K.G.O.) Bn. Madras Pioneers
1 Coy. Mandalay
Q.V.O. Madras S. & M.
H.Q. Sec. & Depot &
2 Coys. 3/20 B.R.
Mandalay
MEIKTILA AREA.
2nd Bn. The Manchester Regt.
2 Coys. Meiktila
2 Pls. Taungdwingyi
2 Pls. Minbu.
12 INF. BDE. AREA.
1 Coy. 2nd Bn. The Manchester Regt.
1 Coy. Madras Pioneers
3/6th Rajputana Rifles
3/16th Punjab Regt.
1/17th Dogra Regt.
RANGOON BDE. AREA.
1st Bn. The Buffs
1 Coy. Madras Pioneers
2/5th Mahratta Light Infantry
3/10th Baluch Regt.
2/20th Burma Rifles
3/20th Burma Rifles
2/15th Punjab Regt.
SCALE.
1 inch=32 miles.

clearing up to do and the military police will have a thankless task before them until the civil police can work without support. But the rebels have had a salutary lesson and its effects should keep the country quiet long enough to afford an opportunity for all officials, civil and military alike, to revise their policy and methods on the basis of past experience. If full advantage is not taken of this breathing space Burma will undoubtedly continue to live up to its reputation as "the land of rebellions."

The country is still cursed with *Ahpwes* (secret societies) and one very competent observer in summing up the situation, says—"Rebel organizations may be built up behind a veil of secrecy which is impenetrable to any Government Agency." This is an admission of a very serious state of affairs, but one solution would be to open up the country by means of good roads so that the light of civilisation (together with Burma Military Police in lorries, if and when required) can penetrate the jungles and destroy the foul growths of disaffection and superstition.

SOME SUGGESTIONS FOR THE EMPLOYMENT OF MACHINE GUNS ON THE NORTH WEST FRONTIER.

By Captain G. H. Pulling, 6th Gurkha Rifles.

There have been many adverse criticisms of the Machine Gun Company as compared to the fourth Rifle Company when employed in the hills of North-West Frontier. They are mainly directed against the comparative lack of mobility, the flat trajectory and the vulnerability of the mules. Whether the criticisms are well founded or not, the majority of us have to take the situation as we find it and make the very best of existing conditions.

Here are some of the problems that confront us—

(*a*) To what extent can the Machine Gun Company assist the men on the hills ?

(*b*) To what extent can the Machine Gun Company replace the men on the hill by fire ?

(*c*) How is the Machine Gun Company, with the present organization, to be employed in the hills of the North-west Frontier ?

Some officers have the great advantage of working on the ground, with the possibility of a sharp reminder from an alert Pathan if experimental tactics overstep the bounds of practical politics ; others have hill country on which to work but suffer more lenient treatment from the hands of their instructors and umpires. Wherever situated however, there is a tendency to consider ground with a " four rifle company " eye. An officer who has been trained with, and has fought with, rifle companies on the Frontier knows the tactical value of a feature at a glance. He considers it in terms of accurately timed and fast moving bodies of men who use the ground perfectly, occupy the feature, deny it to the enemy, make sure that no enemy has got close up to the piquet during the occupation and who finally get away cleanly and quickly when required to withdraw.

Throughout this article the terms " Holding Ground," " Denying Ground " and " Covering Fire " occur frequently and in order to ensure uniform interpretation they are defined as follows :—

(1) *Holding Ground*—when the Machine Guns deal with ground which would normally he occupied by Rifle Companies.

(2) *Denying Ground*—when the Machine Guns are used to prevent the enemy initiating a movement dangerous to the piqueting troops.

(3) *Covering Fire*—implies either a task of protecting troops which are on the move, or a task of assisting troops which are actually engaged with the enemy.

Before discussing the various types of operations which may be carried out on the Frontier, a suggestion that the combined use of Machine Guns and Lewis Guns might solve the fire problem, should be considered.

The Machine Gun is greatly superior to the Lewis Gun both in accuracy and sustained fire ; this superiority is due to range taking, the fixed mounting and strong mechanism. On the other hand the Lewis Gun is more mobile and can switch more rapidly from target to target.

The fire effect of both Machine Guns and Lewis Guns is greatly reduced in the hills by the broken nature of the ground. In any area engaged, there are bound to be many bullet proof hiding places for the enemy, and frequently there will be sufficient dead ground for the enemy to move without great exposure.

Suppose a section of Machine Guns, with a section of Lewis Guns attached, engaged an area comprising the slopes of a hill feature on which there were known to be some enemy : the Machine Guns could search the hill side systematically and the Lewis Guns with enhanced accuracy, owing to the range finder, could engage fleeting targets within the area. The fire could not be expected to dislodge a determined enemy, but it would certainly go far towards neutralising him. Further, should the tribesman be caught at a disadvantage by such a fire unit, he would surely think long before taking the risk of such heavy punishment a second time. Several such units, co-operating with artillery, open up far greater possibilities.

Whether a Lewis Gun Section is attached to a Machine Gun Section or not, all Lewis Gun Section Commanders should be trained to co-operate with Machine Guns. A Lewis Gun Section firing in the same area as a Machine Gun Section, and from the same locality, should automatically put itself under the Machine Gun Section Commander for fire direction and control. If the Lewis Gun's task does not permit its moving to within voice control of the Machine

Gun Commander, then the Lewis Gun Section Commander should certainly go to the Machine Guns in order to see exactly what they can and cannot engage. The Lewis Gun Commander should also get Key Ranges from the Machine Gun Range Taker. If owing to time or enemy action, or any other circumstance, personal liaison between the Lewis Gun and Machine Gun Commanders is not possible, then the Lewis Gun Commander must rely on information he has received regarding the tasks allotted to the Machine Guns and on the training he has received in peace. It is therefore important that such information as is communicated to Rifle Company Commanders should be passed on quickly through Platoon Commanders to Lewis Gun Section Commanders; of greater importance still is the training in peace which should include some combined battle practices. A Rifle Company Commander might also consider the possibility of lending a Lewis Gun Section from the Reserve Platoon to a Machine Gun Section located in his area. The Company Commander would have to state the amount of ammunition the Lewis Gun was permitted to use and he would have to arrange for the recall of the section in case of emergency.

There is one more general remark which applies to Machine Guns in all phases of Frontier Warfare—it concerns the distance the guns should be from the area which is to be engaged.

Throughout this article I wish to stress the fact that Machine Guns must be much closer to their target in the Frontier Hills than on the Plains particularly when giving covering fire. It is not a question of accuracy or of hitting power. It is for the benefit of the Fire Controller, who must be able to locate our own troops, watch their movements, from their movements diagnose their trouble, and then, on his own initiative, administer the dose of fire requisite.

In frontier warfare the enemy have no artillery and they do not use automatic weapons, hence it is only the ground that will prevent Machine Guns getting up close to their target in time to be of use. Admittedly there will be occasions when it is impossible to get the guns up in time during the advance and also times in the withdrawal when they cannot be left close enough to give effective covering fire. As however the ability to appreciate the ground with the " Machine Gun eye " becomes more general, the occasions on which the Machine Guns are correctly used will be much more frequent. Machine Guns

must be sufficiently far from the enemy to prevent their being spotted and neutralised by rifle fire, and they must be close enough to open effective fire instantaneously on their own initiative.

The various types of operations and fire problems which confront us are :—

(1) Piqueting a route on which permanent piquets have been constructed.
(2) Piqueting a route without permanent piquets.
(3) Protecting the construction of a permanent piquet.
(4) Burning a village.
(5) Camp protection.
(6) Co-operation with artillery.
(7) Fire Direction.

These operations are here considered on a small scale (enemy strength about 50 to 150 rifles) in the belief that the correct tactics in bigger actions will be derived from experience gained in the small ones.

Piqueting a route on which permanent piquets have been constructed.

This is probably the most frequent operation required of Regular Troops. Its object is to allow a convoy of pack animals or Motor Transport to pass through without interruption.

The established permanent piquets deny to the enemy any hope of successfully cutting our communications; he will therefore be concerned with the tactics to which he is most suited. As an individual fighter he counts success by rifles and ammunition captured; tangible evidence of his success in the form of some dead and wounded left out greatly increase his morale.

Piqueting the route may be divided into three phases :—

(*a*) The advance and occupation of road piquets.
(*b*) The protection of the route while the convoy is passing.
(*c*) The withdrawal to camp.

(*a*). *The advance and occupation of Road Piquets.*

During the advance the most likely enemy action is a rifle snatching *chapao* generally arranged for the unwary piquet which gets out of sight of its covering troops.

The Machine Gun tasks will usually be straightforward covering fire, probably firing across the valley. The sections can be leap-frogged forward for this purpose. The Machine Gun Company Commander should be in close touch with the Officer putting up the piquets and should work his sections successively into covering positions. It should be mentioned here that leap-frogging forward is a tiring business for both men and mules but they can both be saved to some extent by keeping only the gun and 1st ammunition mules with the sections. The remainder of the mules should move well forward in the column under the Company Havildar Major. In exceptionally bad country one may be tempted to use single guns in order to provide sufficient echelons to keep up with the advance. If, in most exceptional circumstances, one is forced to adopt this course, the great difference in the tasks that can be allotted to single guns must be kept in mind.

The great reliance placed on Machine Guns is due to their accurate and sustained fire. If properly handled they can get fire effect with the first burst and keep it up as long as the ammunition lasts. *By Splitting the Section this main characteristic is lost.*—Range taking, control of the ammunition supply and the supply of spare parts, are only a few of the difficulties to be overcome. It is a human failing that in spite of great mental effort, it is almost impossible to avoid placing the same reliance on a single Machine Gun as on a Section. One may get away with it; on the other hand, the one prolonged stoppage of the year may occur or a chance bullet may pierce the working parts of one gun; and then the most trustworthy weapon will fail.

(*b*) *The Protection of the Route while the Convoy is Passing.* (*Pack Transport*).

In the case of pack transport the tribesmen may endeavour to knock out sufficient animals to delay the subsequent withdrawal and thus create the situation most favourable for them to inflict casualties on a piquet about to retire. It is the great importance of keeping sufficient time in hand to counter-attack and evacuate casualties, that makes a delay to the convoy so disastrous.

If Machine Guns are used to hold ground from which the road is visible, it is not to be expected that they will prevent a few sharp-shooters from doing some damage with their first burst of fire. On

the other hand, ground from which the road is not visible, particularly isolated features, may be held by a combination of Machine Gun and Lewis Gun fire. This fire must be applied from at least two directions.

On the whole a generous allotment of Machine Guns to the reserve for the express purpose of extricating a piquet, if and when attacked, will meet most situations. The use of reserve Machine Guns is discussed in the paragraph dealing with the withdrawal.

Motor Transport.

The main characteristics of motor transport which effect the piqueting troops are classified below as advantageous or disadvantageous.

Advantageous.

(*a*) It passes a point in a comparatively short time.

(*b*) It is not as vulnerable to rifle fire as pack transport.

(*c*) It is not an easy mark for a sniper to hit.

(*d*) If disabled it can be removed from the danger area more easily than pack transport or dropped loads.

(*e*) It brings with it scope for Armoured Cars or Light Tanks.

(*f*) In case of emergency it can be accelerated over a short distance.

(*g*) With traffic control and good salvage arrangements exact timings can be adhered to when opening and closing the road.

Disadvantageous.

(*a*) It is liable to interruption by obstacles.

(*b*) It must be kept rigidly to the road in mountainous country.

(*c*) It is liable to mechanical breakdown.

Hence, compared with Animal Transport, Motor Transport places a completely different complexion on the problem of protecting the road; and, while Machine Guns can be used more freely for this purpose, the whole problem is not by any means solved the troops with 1st line, equipment and ordnance mules have still to move out into position and return after the task has been completed.

If Motor Transport protected by Armoured Cars, is used to carry piqueting troops to and from suitable debussing areas, a further change can be expected. However, the writer has no practical experience of the use of Machine Guns in this eventuality and the

opinions he has formed are mere conjecture. It was partly with a view to encouraging some officer with recent experience to give his views that this article was written.

(*c*) *The Withdrawal.*

There is no need to stress the fact that most opportunities are presented to the enemy during the withdrawal. It is also obvious that fast moving, well timed withdrawals are essential. Now the Machine Gun is comparatively speaking a slow mover, and, if left in position long enough to be employed at the critical time, may well be the cause of disaster. The tribesmen know, too, that where there is a Machine Gun there is enough ammunition as a prize to warrant exceptional risks.

However in every block of mountainous country there are positions on which it is possible to pause during the withdrawal, and it should be the duty of Machine Gun Commander to ascertain from the Officer Commanding the Piqueting Troops, where are the lines on which he is prepared to pause. The Company or Platoon Commander should then be sent back to reconnoitre these positions with a view to putting the sections into action as they come back. The intervening ground should be dealt with by the leap-frogging process, but the Machine Guns should be a little further from the troops they are covering than in the advance.

In spite of excellent arrangements, the time is certain to come when casualties are suffered during the withdrawal and it is then that some Machine Guns in hand will prove so useful. For this purpose it is suggested that the ground in the vicinity of each permanent piquet should be reconnoitred beforehand, with a view to locating Machine Guns in such a way that they can cover an action within effective Machine Gun range and then after the troops have withdrawn, retire into the permanent piquet for the night. It is not advocated that Machine Guns should be placed in these positions in anticipation of trouble, because that would give the enemy the opportunity of avoiding areas dangerous to him. The more usual course would be to send them up after the initial trouble had occurred. The whole plan should be worked out to the last detail and section training should include practice in this manœuvre. This training might be divided into two stages.

The first, a drill to ensure that the N. C. Os. and gun members can separate without confusion the ammunition and equipment to be left with the guns from that to be sent back on the mules.

The second stage, tactical, to ensure that all methods of getting into a piquet are well rehearsed. To take an instance :—Suppose the gate through the wire of a permanent piquet is under fire and the wire on the opposite side of the piquet is defiladed, an obvious method of getting into a piquet would be to cut the wire on the defiladed side, pass the guns and ammunition over the wall, fill up the gap in the wire with loose wire or a spare knife rest, and then scramble into the piquet.

The disadvantages of this scheme are that either the enemy will choose ground which is not under observation from a permanent piquet or he will neutralise permanent piquets in the area in which he intends to operate. However there are three factors in our favour. Firstly, a short distance from the piquet the ground under observation may change completely. Secondly, the Machine Gun can give full value at ranges beyond the neutralising zone of rifle fire, and at the time when the decision to send the Machine Guns up is made, the enemy will have disclosed his main dispositions; it should therefore be possible to find a suitable permanent piquet without taking undue risks. Thirdly, the surprise effect may completely upset the enemy's plan.

Finally, a word about ranges ; owing to the great difference in visibility due to the various natural phenomena such as light, shade, scrub and broken rock, it is impossible rigidly to divide Machine Gun ranges into " close," " effective," and " long," as is done on the plains. However it is safe to say that during the withdrawal the majority of useful Machine Gun fire in the hills will be given between 800 yards and 1,400 yards.

Piqueting a Route without Permanent Piquets.

The absence of permanent piquets leaves more courses open to the enemy. He can, if he wishes, oppose the advance to any particular feature, he may develop a more determined attack on the piquets after they are in position, and he can follow up the withdrawal so far as the ground permits his doing so. The general employment of Machine Guns however, does not differ very greatly from that described in the last operation ; covering fire during the advance is if possible, more

important and a slight delay in order to let Machine Guns catch up may be necessary.

One matter that has not yet been mentioned is the height Machine Guns should be taken out of the nullah to give covering fire. There is considerable divergence of opinion on this matter but the controlling factor is whether the Machine Guns can or cannot see, that is to say, whether they can see the likely targets.

During the advance the chief ingredient in the enemy plan will be a good gateway, and therefore he need not be expected on the forward slopes which are liable to heavy covering fire from us. His positions will almost certainly be in ground behind false crests and on spurs and in re-entrants defiladed from the nullah bed. This ground usually can be reached by Machine Gun fire from long ranges, or from positions further forward but well out of the nullah bed. In the first case the covering fire may not come until it is called for and it may have to be directed. In the second case the advance may have to pause until the Machine Guns are in position, but the fire if required will be instantaneous. Which of the two is the better?

In the withdrawal some of this preparation to give covering fire may have to be sacrificed, excepting of course that which is to come from lines on which the Commander is prepared to pause.

To sum up. Get the guns as high as necessary for observation but keep them as low as possible for speed. These two considerations over-rule all others, there will be a continual tug-of-war between the two, which must be decided over and over again as each tactical situation arises.

While on the subject of speed, the importance of individual training must be emphasised; individual training of the highest order is absolutely essential throughout the gun teams and sections. The slightest delay caused by ignorance or slackness on the part of any individual may have far-reaching results. If any members of the teams can be considered as requiring a higher standard of training than the others, it will be the mule leaders and ground scouts; the latter must also be expert mule leaders.

Protecting the Construction of a Permanent Piquet.

This operation differs from the others discussed, in that the heart of the operation is on a hill top or on a spur well above the nullah bed. It is our object to complete the piquet in one day sufficiently for the

piquet to withstand an attack immediately the covering troops are withdrawn. There is so much work to be done that delay in construction may have very serious consequences. It is therefore the task of the covering troops to keep the enemy out of effective rifle range of the piquet during the whole period of construction.

An annihilating fire plan cannot be put into effect until the enemy discloses his presence, hence it is expedient to hold all ground from which the construction parties can be fired on, by occupation. The enemy's most effective course is then to attack some portion of the ground occupied, with a view to gaining an area from which he can fire on the piquet. Consequently the Machine Gun tasks will lie in ground from which such attacks can be initiated, that is to say they will be required to deny ground to the enemy. To do this they will have to be located well out in the ring of protective piquets.

The manœuvre entails great mobility on the hillside, perfect ground scouting and a sure eye for Machine Gun targets. The fire plan can be formed on the lines suggested for holding ground by fire, which is discussed later. The hill climbing ability of the mule is greatly increased if the men are familiar with the use of drag ropes. The ropes are attached to the breeching when ascending and to the breast collar when descending.

Burning a Village.

Although this operation is punitive in its conception, its real value from the point of view of the troops carrying out the operation, is that it makes the tribesman fight on a day of our own selection. We must take the opportunity to deal out some hard knocks if we can. The tribesman can still choose his point of attack but he has to make his choice quickly and carry out the attack unrehearsed. Our protective measures in this operation are not hampered by long columns of vulnerable transport. Every unit in the formation operating must be prepared to take its chance of some casualties as it would in any battle on the plains against a modern enemy. Working on this assumption there is considerable scope for the employment of Machine Guns, and hence great possibilities of inflicting heavy casualties on the enemy.

Now to take the operation in its various stages. We first of all move out and protect the route up to a favourable point from which

the hills round the village can be seen. The plan for the protection of the demolition and burning of the village must then be made.

It is most important that a thorough search for ground which can be held by Machine Gun fire should be made, and if the Commander of the troops responsible for the protection of the demolition of the village is not satisfied with the view obtained in his original reconnaissance, he must carry out a subsidiary operation in order to get the view he requires before forming his final plan. If this is not done, the inevitable result will be that a plan for the rifle companies to carry out the protection will be made and the Machine Guns will be asked to fit in as best they can ; in these circumstances it is obvious that many opportunities may be lost.

When selecting ground to be held by Machine Gun fire, the following are the main factors to be taken into consideration :—

(1) Is there sufficient cover for the demolition troops to get into the village and out again without heavy losses ?

In this connection it should be remembered that the Machine Guns will be in position before the demolition troops are expected to move into the village and the local protection troops will have " mopped up " the village and will have been posted to guard all approaches.

(2) Can the demolition troops carry out their task in the village with local protection to stop a rush and Machine Gun fire to deal with enemy further off ?

It must be remembered that casualties in or around the village will be far cheaper in the long run than casualties on the hills beyond.

(3) Will the Rifle Companies on either flank be able to hold their ground without the assistance of the Machine Guns, allotted to the special tasks ? It is most probable that the Machine Guns will be available to cover the Rifle Companies up to and down from their positions, but any assistance required beyond that will necessitate a Brigade task either to deny ground beyond the Rifle Piquets or to hold the ground beyond the village.

(4) Can Machine Gun fire be brought to bear on the ground to be held by fire from at least two directions ? To gain really searching effect in the hills, this is necessary.

(5) What effect will the smoke from the burning village have on the fire plan ? The smoke is a big factor whatever the plan ; it gives the enemy information that the retirement is about to commence and it interrupts communication and observation. However the more ground that is held by Machine Guns the quicker will be the withdrawal out of the smoky area and the Machine Guns are capable of firing at pre-arranged targets through the smoke.

Owing to the careful reconnaissance required before forming the Machine Gun plan, it is certain that time will be lost during the advance, but when the withdrawal commences, the saving in time then, will make ample compensation for time spent on reconnaissance during the advance. The other tasks which can be allotted to Machine Guns should present no difficulties beyond the problem of getting the guns into and out of positions. It should, however, be remembered that in this operation the enemy will come on far more boldly than in any other and therefore opportunities for ambush by Machine Gun fire should not be overlooked. In the withdrawal the Machine Gun is eminently suitable for an ambush provided it has a good line of retirement and some local protection. It is easily concealed and produces a large volume of fire.

Camp Protection.

The tasks for Machine Guns in camp protection may be classified as follows :—

(*a*) Protection of Perimeter .. By firing on fixed lines.

(*b*) Lines of approach .. The guns on fixed lines will not usually have a wide enough arc when firing through loop holes to carry out both tasks.

(*c*) Protection of Camp Piquets. This again is a special task though it may be possible to make the protection of a camp piquet a primary task and fire on lines of approach a secondary task for the same guns.

(*d*) Protection from heavy sniping.

The tasks in (*a*), (*b*) and (*c*) present no unusual difficulties beyond siting the gun positions. The perimeter takes its shape from the ground and wire takes its shape from the perimeter, but whenever possible during the construction of the camp, wiring parties should give Machine Guns a straight line along which to fire.

As soon as the perimeter is complete and the wire has been put up, the Machine Gun plan should be included in the general alarm scheme, but as many of the Machine Gun personnel as possible should be removed from the perimeter.

As for sniping, the most effective course is to ignore it completely. This is most discouraging to the enemy and in all probability the camp is less disturbed if the sniping is not replied to. Persistent sniping will, however, disclose some regularity of time and place so that an ambush by Machine Gun fire may be prepared.

Co-operation with Artillery.

This branch of the Machine Gun Commander's responsibility has not been mentioned before in order to save repetition in the discussion of each operation, but co-operation with Artillery is as important in Frontier Warfare as in any other. The Machine Guns can and will pin the enemy in a definite locality on many occasions, but the Artillery will be required to get them moving again.

The fire plan, for the purpose of holding ground by fire, should be somewhat as follows :—

The Machine Guns must be prepared to search the areas systematically.

The Artillery will be required to force the enemy to move out of cover into Machine Gun fire.

Some Lewis Guns will be required to deal with fleeting targets.

The main thing to remember is that tasks for Machine Guns and Artillery will usually lie in the same area. Close personal liaison is therefore necessary during the formation of the fire plan and also during its execution.

Fire Direction.

When the Machine Gun Company is required to hold ground by fire, some quick system of Fire Direction is very necessary. In order to bring fire to bear from several directions, sections must be widely

separated and communication is only feasible by semaphore or by signallers with visual telegraphy.

Success has been attained on the field firing range by means of a simple code, but it depended on the opportunity to collect fire unit commanders before they moved out to position, at a rendezvous from which the feature to be held by fire was visible. The ground to be held was divided into areas and sub-areas and given code letters. Then, by the code, all sections could be switched on to any sub-area in less than four minutes. They could be directed to fire by observation or to fire a limited number of rounds at given rates or to fire a pre-arranged timed programme. Finally, the sections were trained to re-engage targets in their own area on completion of the task given by the code.

THE HANKOW "INCIDENT."

(EXTRACTS FROM THE DIARY OF A NAVAL OFFICER).

Monday, 3rd January 1928.

This was the last of the three days celebrations ordered by the Cantonese Government to commemorate their "Victories" and the general formation of Trade Unions. It was a fine warm day, and a public holiday, so large crowds were about.

About 12-30 p.m., as crowds outside several of our barricades were being vehemently harangued by soldier or student orators, naval armed parties to man barricades were landed. All the subsequent trouble occurred at one position only—the barricade known as A. 1. on the south end of the British Bund, facing the Custom House, which is on the border of the Native City alongside one of its chief gates.

At A. 1. the street is about 30 yards wide, then comes 20 yards of ornamental turf and promenade, and then about 200 yards of hard mud bank sloping to the river. A. 1. itself was a sandbag breastwork in the middle of the road occupying about one-third of the available width of the road. Thirty yards ahead of the breastwork were kept sufficient coils of concertina barbed wire to stretch right across the road when required. On this occasion, the wire defence was open and any attempt later to close it would have been impossible without firing on the mob. Indeed, it was not long before the mob removed the barbed wire bodily.

At 12-30 p.m., A. 1. was occupied by two sections of Marines, but the haranguing of the mob just outside the post continued. A large section of the crowd, to all intents and purposes sightseeing, spread along the turf and promenade in the flank and to the rearward of our sandbags.

Shortly after 12-30 p.m., it was reported that A. 1. was being stoned by the mob. Two sections from H. M. S. *Woolston*, which were in reserve on the pontoon, were landed and hurried to A. 1. *via* the promenade which was cleared without difficulty. Stone throwing ceased for about 30 minutes.

As usual all our landing parties were fully equipped and had Lewis guns, and each man carried a loaded truncheon. The general order was "At all costs an incident is to be avoided," which was taken to

mean that if the mobs could possibly be held by any other means, not a shot was to be fired, even if it entailed a short retirement.

At 1 p.m. there arrived at A. 1. an extra posse of native (Chinese) police, but these proved perfectly useless in any way. The only police who rendered any assistance to our chaps at any time were three or four Sikh policemen who were there from the start, and they mostly performed in rear of our troops.

At about 1-30 p.m. much more stone and half brick throwing commenced. This was almost entirely done by small boys and youths who fringed the advanced edges of dense mobs of coolies armed with their carrying poles. From 1-30 p.m. to about 4-30 p.m. this pelting continued without cessation and the party—now reinforced by another section from H. M. S. *Woolston* and by a few details from H. M. S. *Magnolia* and *Woodlark*—stood the ordeal with the utmost steadiness and restraint. At times the mob had edged so close to the men—now fronting two ways, across the road and along part of the promenade—that it was necessary to charge with batons and rifle butts to get more elbow room. In all, about four or five charges were made in the course of the afternoon, and most of the casualties occurred on the mud foreshore. These charges ended in the line being extended from the road right down the foreshore to the river—a frontage of about 250 yards, which was necessarily very thinly held subsequently. In all the charges the result was the same—the troops got their own back for a few short moments, and then had to retire back to their own line. This move back was always attended by greatly increased brick throwing.

Pretty well everybody was hit by bricks at some time or other in the afternoon, but the restraint and discipline displayed throughout these three hours by all hands were surprising. A few men did use their bayonets with discretion during the charges, but not a rifle was loaded all day. However, it is quite certain that these same men could not have stood another day's pelting like this without shooting. They blessed their steel helmets!

Most of the men, who bore the brunt, got nothing worse than bruises but two men from H. M. S. *Woodlark* were more seriously wounded—one was brained after his helmet had been knocked off, and another bayonetted in the leg by a Chinese who had seized the brained one's rifle. The Chinese said that six of them were killed

and 100 injured, but from positive information only one was actually killed.

By about 4-30 p.m. the line had retired to a street corner about 120 yards in rear of barricade A. 1., which was then in the hands of the mob, who quickly pulled it to pieces. At this point all the reserves were out, but the line was finally established, and although promiscuous brick bats were still flying about, the worst was over.

At about 5 p.m. Cantonese Military Police and armed soldiers arrived—only three hours late—to restore order and to give the "protection" to the Concession they had "guaranteed" for the past fortnight. They did, however, push back the mob on this occasion. Had they not, what with darkness coming on, the troops would certainly have had to shoot to save the Concession.

There were no more reserves—all our other barricades were being held at the time, though none of the others had trouble. The local Volunteers were mobilised and holding their allotted barricades. All effectives were employed. So serious did the position seem that 100 American blue-jackets were asked for to form a reserve at the Bank. These arrived 1½ hours later.

At about 6-30 p.m. an official arrived from the Cantonese Commissioner for Foreign Affairs and said that if the troops were withdrawn from the barricades they would guarantee protection of the Concession with their best troops from outside. The troops were ordered back on board their ships and the other half into the Bank and Volunteer Headquarters—the Americans were sent back about 9 p.m. Occasional patrols were kept going round the Concession for the night.

Tuesday, 4th January.

In the morning the Cantonese Commissioner for Foreign Affairs asked for a conference with the Consul-General and the Municipal Council. At this meeting the Cantonese authorities guaranteed once more the "fullest protection" of the Concession from outside and said they would use their most reliable troops to maintain it at all costs—but all British forces were to be withdrawn on board ships, the Marines included, for whom there was practically no accommodation. *Nobody put any trust at all in this guarantee. Had we not seen during the past fortnight just what a similar guarantee was worth.*

However, all troops returned on board their ships at 11 a.m.

By 12-30 p.m. considerable mobs of coolies were going about on the Bund beating up native (Chinese) police. By 2 p.m. none of these police were left on the streets, all barricades were razed to the ground and the mobs increasing in size and ugliness. By 4 p.m. there were reports of Englishmen being roughly handled, various inflammatory posters appeared, the War Memorial Cenotaph was badly mutilated and window smashing was started.

The first instructions to evacuate women and children were not issued until about 3 p.m., when they were sent to the British Municipal Council, which had continued to function though virtually besieged in their offices. From 5 p.m. onwards it was considered almost certain death for any Englishman to show up on the streets, and the British Volunteer Company which had been demobilised at 11 a.m., when the troops returned on board their ship began concentrating again at their Headquarters, without orders. Some of them had much difficulty in getting into their building. By 6 p.m. the mob was entirely in charge and very dangerous—and about 60 volunteers were besieged in their Headquarters.

Since noon the troops had sat tight on board, interested spectators of howling mobs performing along the Bund. The sole line of communication was a telephone to the Bank. The only action taken to stop the mob violence was the repeated *protests* of the Consul-General to the Cantonese authorities.

Suddenly, at 7 p.m., came the report that the Cantonese Government had marched 300 armed soldiers into the Concession, ostensibly to restore order, as they professed themselves unable to do so from "outside". Everyone, however, quite realised now that the Concession had gone for good and all—the Cantonese would never now give up its control. Soon after the arrival of the Southern troops the mobs were dispersed, order restored and looting stopped for the night.

The question of the 60 volunteers besieged with their arms and 12,000 rounds of S. A. A., now arose. The Cantonese authorities were requested to give a safe conduct to them in order that they could evacuate their Headquarters. This request was granted and the Volunteers evacuated under the protection of Southern troops, at 9 p.m. These Volunteers, many of whom had been roughly handled

that afternoon, and all of whom were full of fight, had a dreadful few minutes when they heard this decision. Their Corps had been in existence since 1911—and to be disbanded without firing a shot in defence of their Concession!

There were at least three separate mutinies at their Headquarters, and it was touch and go whether they would shoot the town up or not. When their Company finally marched down under arms to the pontoon at about midnight there were many hard remarks being passed about "*taking out naturalization papers as American citizens.*"

Wednesday, 5th January.

Hurried arrangements for evacuating all women and children had been got out the night before and the steamers and guards arranged. 2 p m. Wednesday was the time fixed to commence the evacuation which was to be *via* the ex-Russian and French Concessions to wharves downstream whence the refugees were to be transported in armed tugs to the various ships. Only able-bodied men were to remain behind. These latter, thanks chiefly to Dr. Lyon Brown (late C. O. of the Volunteers) were very cleverly all concentrated during Wednesday and Thursday in the big A. P. C. building on the Bund.

On the forenoon of Wednesday, perfectly enormous crowds filled the streets of the Concession, forming numerous processions, waving banners, cheering, etc. to celebrate the "capture of the Concession." No English could venture out, except under military escort.

At about 1-30 p.m. most providentially, it started to rain, and continued steadily for 24 hours. All crowds immediately melted away —never was rain so welcome. The evacuation was able to go ahead from Wednesday afternoon all through the night and well into Thursday without a single serious incident—nothing worse than attempts at extortion and intimidation on the part of the coolies carrying the luggage. This was stopped by sending seamen guards to all embarkation pontoons and to ships loading in the stream. The record fee secured by carrying coolies early in the day was 100 dollars for carrying two bags. After a bit the fee was standardised at 60 cents.

Thursday, 6th January.

By this day the number of able-bodied Englishmen concentrated in the A. P. C. building reached 160. Of these a certain number had managed to smuggle in revolvers and one rifle. Late Wednesday night five of the leading hands of the party managed to smuggle in

revolvers and get through to the ships. Mr. Lyon Brown was nominated as O. C., A. P. C. building. He was supplied with a Lewis Gun disguised in H. M. S. *Woolston's* cricket bag. The Volunteers managed to smuggle in gear successfully and subsequently got two Verey pistols, an Aldis lamp and some signal flags. It was arranged that concerted plans of action would be taken should the A. P. C. building be set upon and they had to fight their way out. About 50 of them were armed and they had in that building some victualling stores, which were sufficient for six weeks' supply for 300 men. The building is about a quarter of a mile from the river and under constant observation.

It was great luck getting the arms through on Wednesday night because on Thursday onwards all houses in the Concession had been very strongly picketed by Southern troops and they now had wind of what the Volunteers were doing in the A. P. C. building. Anyone entering or leaving was thoroughly searched. These house pickets did not stop foreigners entering offices because the Southern Foreign Minister, Eugene Chen, was most anxious that business should be resumed. But cases occurred where men, who had visited their offices, had been prevented from leaving for hours.

Thursday was a quiet day because it was raining most of the time. Had the Chinese gone for the A. P. C. building there would have been a very pretty show.

Friday, 7th January.

It rained hard all day, so things were very quiet ashore—no crowds. In spite of numerous pickets and Cantonese police guards which pretended to preserve order, considerable quiet looting was going on, but nothing very wholesale.

Mr. Williams, refugee from Wuchang, came in this day reporting things very bad over there. He had lived there for 14 years and had never before had to clear out.

Everybody who should be evacuated (and did not deliberately refuse) had gone by Friday, and several vessels had already left for Shanghai. The total number evacuated was about 400.

It was heard this day how anxious Eugene Chen was to have business restarted. The commerce of the port was practically stopped, and, apart from the financial loss to all Chinese merchants and

banks, the huge numbers of coolies now unemployed were likely to get quite out-of-hand, and might even turn on their "Southern Saviours" when they began to feel hungry. The next fine day, however, would quickly show what turn events were taking. Posters which read "Business or the Concession" were put up everywhere in Chinese and English. This was interpreted to mean, either :—

(*a*). Attempt to regain Concession and we shall boycott you and ruin your business.

(*b*). Resume business or we shall keep your Concession.

Most people thought (*a*) was the correct meaning.

So far however not more than two Englishmen had attempted to go near their offices, and it seemed quite certain that if the Volunteers left the A. P. C. building and returned to work, there would never be a chance of their being able to concentrate again in the building. Very early on Wednesday came the definite news that the Cantonese Government had seized the Hong Kong and Shanghai Bank (the finest building in Hankow) and made it the permanent Headquarters of their Labour Bureau.

Saturday, 8th January.

Another cold and wet day—and blowing hard too. Still no means of knowing what may happen next. No crowds whatever are to be seen in weather like this. A new poster to-day, "Turn out the English gunboats by arms."

A torchlight procession was promised this night but it did not come off. Responsibility for British lives in Hankow was now narrowed down to the crowd in the A. P. C. building, so every one was much happier as regards freedom to act, if and when the time came. What struck all as remarkable was that except on Tuesday and Wednesday, there was no attempt to boycott the men-of-war. Since then fresh provisions and canteen gear had come as usual.

All American women and children were evacuated on Thursday and Friday, the British lending them two "Jardine" ships for the purpose. A few French families also went.

The native (Chinese) police changed their cap badges, tied the usual tricolour ribbon round their necks and took on as Cantonese police.

MORE OR LESS OF A MESS.

I

"END THE MESS."

BY 'ECONOMIST.'

The serious shortage of candidates for commissions in the Army is to a very great extent the result of the financial situation. The regimental officer of to-day has to be highly educated and parents feel that, after an expensive education at a Public School, Sandhurst, or at a University, the pay, *when the regimental expenses are taken into consideration*, is a most inadequate return for the outlay they have made.

The class from which the commissioned ranks have been recruited for generations is no longer in a position to put its sons into the service. The retired officer knows the burden of debt he sometimes had to shoulder for years, and unless he can give his son an allowance, he feels it is in the best interests of the boy to put him into business. On the other hand the Army for obvious reasons cannot afford to lower the standard of its officers.

The percentage of young married officers is now higher than it has ever been, except possibly for a short time during the War. These conditions must be catered for. It does not help matters by saying "A junior officer has no business to be married." He is married and that is that. What steps, then, can be taken to make the Army as a career more attractive to the right stamp of candidate? The solution, if it is impossible to increase the pay, seems to be to cut down regimental expenses.

In view of the present necessity for economy in the Army surely the question of the abolition of the Regimental Mess should be seriously considered. It would be a step in the right direction, lifting a heavy burden off the whole regiment. Running what amounts to a private hotel for the use of perhaps two or three officers is absurd. Two instances may be given. In one battalion there are three unmarried officers, in another there is only one, and these are not isolated cases. Another point which must be taken into consideration is that even these officers are not always with their regiments, but spend a large part of their time away on courses, leave, etc. Many of the married officers seldom go into the Mess and it is not often used as a Club or a meeting place by the officers of the regiment. However few members

there are, the running expenses of a Mess continue with but little reduction for those who are away, and these running expenses have to be met by the regiment as a whole.

There is no doubt that the Mess was a sound institution for the young officer in the days when many of the senior officers were unmarried and lived in it. A good deal was said about the discipline of a Mess being such an excellent thing for the newly joined officer. This is now a thing of the past; there is not the same discipline, and never can be in a Mess in which there are only two or three junior officers. These young men are almost entirely on their own and can do pretty well as they wish.

In most stations in India now there are hotels, boarding houses and Government Quarters. The married officer has often to live in them, so why cannot the unmarried officer? No business firm runs a private hotel at the expense of the other members of the firm for the convenience of its young assistants out from home, so why should it be done in the Army? It is not noticeable that young men who come out to this country in the I. C. S., banks and firms are any the less well-behaved because they have not a Mess to live in and are not subjected to its discipline. Chummeries are run in nearly all towns in India with a business community, and the cost per head rests entirely with the men themselves.

The cost of running a Mess is out of all proportion to its worth. A large staff has to be kept up even if there is only one dining member; the rent of a Mess is usually far higher than that of a private house of the same size, and the servants' wages considerably more than those paid by married officers. One instance will suffice to show this. In a certain station no married officer paid more than forty rupees a month for a first class cook. Yet the Mess cook, simply because he was the *Mess* cook, was paid eighty. It was actually suggested at a Mess meeting that the married officers should pay an extra subscription to meet the Mess cook's wages! This suggestion was turned down, and a few telling remarks made by a bachelor member of the Mess on the quality of food served at the Mess table compared with that at the table of a married officer, and on the difference in price.

The outlay necessary to supply an officer with Mess kit is considerable, frequently putting a young man into debt at the beginning

of his service. Why cannot ordinary evening clothes be worn, with decorations if necessary? Mess kit is unbecoming to most men, and is neither comfortable nor healthy. The custom of presenting silver to the Mess is an additional expense to the officer. It was first introduced as a means of supplying the Mess with plate it really needed. Most Messes now have a vast accumulation of unused and often unwanted silver, yet this store is steadily increasing.

The existence of a Mess means an enormous amount of extra work to already overworked officers. The time spent on checking stores, Mess accounts, catering, etc., could be spent far more profitably in military study, training, and games. There would be a large saving in money to Government and in worry to officers if there were no Mess to move when a battalion is changing stations—a frequent occurrence these days. The I. A. S. C. have no regular Mess, yet the officers of that corps appear to find quarters to suit them. It may be argued that they usually live in a Regimental Mess, and at times run the risk of being looked on as nobody's babies. The I. A. S. C. officer's annual subscription to his general Mess is very small when compared with that a lower paid regimental officer has to pay. This may be a reason for the present large waiting list for the I. A. S. C.!

Continental Armies have no Messes, yet this fact did not seem to tell against them in the Great War.

What will be the fate of the Regimental Mess when the Indian Army is Indianised? The proportion of married officers will then certainly be higher than it is now, as very early marriage is the custom in this country. Are Indians going to pay towards the upkeep of an institution which is almost entirely British in its ideas and customs and which is now being kept alive through sentiment and tradition only? Indianisation spells the death of the Regimental Mess in India. That Mess life is foreign to Indians is clearly seen, and it is an open secret that they find it irksome and in some ways unsuited to them in this climate.

Until the total abolition of the Regimental Mess can be brought about, a Station Mess would meet the demands of most unmarried officers for the time being.

This article will doubtlessly be ranked as sheer heresy by the pre-war officer, but he must realise that times have changed. The Regimental Mess is no longer an absolute necessity; it is an expensive

luxury which no one can now afford, while the objects for which it was originally instituted simply do not exist at the present day.

To sum up, the advantages that can be claimed for the substitution of Station Messes for Regimental Messes are :—

(*i*) The saving of expense to Government.

(*ii*) A considerable financial help to all regimental officers.

(*iii*) More time at the disposal of the regimental officer for his real job.

(*iv*) As a result of (*ii*) above, an improvement in recruiting the right stamp of officer.

II.

"MEND THE MESS."

By 'Mess President.'

The following remarks do not apply to British regiments or those fortunate units which, having few married officers, have a large number of dining members. For these the advantages of a well run Mess are so obvious that nothing need be said. I confine my remarks to the much-married Indian regiment, keeping in mind also the future Indian Army with its Indian commissioned officers who, no doubt whatever, will be more married than European officered units.

As a married man I can speak with authority on the feelings experienced by the non-dining member of a Mess when he scrutinises his monthly Mess bill. After the first spasm of blind rage induced by the increase of, say, item "Servants and Lighting," he is rendered incoherent by the information that he is being cut umpteen rupees for Mess donations on promotion. The *coup de grace* is often administered by the final item "Share of Mess Guests."

The first reaction in the British breast is "I won't pay the—bill," followed shortly by the calmer reflection "I can't pay the—bill." When the heart beats return to normal, the British head takes over control and says "I've got to pay the—bill;" and that's that. The British body thereupon flings the offending Mess bill on the floor, subsides into the cretonne chair, lights the soothing pipe and considers the whole question.

Mr. Pelman says that the balanced mind evenly distributes its energies between Feeling, Thinking, and Action; more or less that order.

Mr. Feeling is predominant at the moment and the temporarily unbalanced mind is working much as follows :—

"This Mess bill imposition is the limit? Why should the unfortunate married man (It's all right. His wife is out somewhere recouping the family fortunes at bridge. She can't hear) have to subscribe to an outfit run for a small possé of indescribable egoists, who are either too young or too selfish to marry? Why?"

"Hasn't he got his own house to rent and furnish? And Mess guests, forsooth! Dammit, does not he already entertain his friends in his own house, including also the aforesaid egoists?"

"And servants! Each egoist has his own private servant and yet has to have Mess servants too to pander to him, and, what's more, expects married officers to subscribe to his comfort."

While the British body draws strongly at the pipe, Mr. Think peeps in, but is as yet only allowed on the threshold.

"Oh, yes! A married man can use the Mess and enjoy its comforts but what's the use of that. He can find time to go there only in the late afternoon when it is empty except for the usual crowd of humming mosquitoes. He can dine in, of course. In fact the regimental rule forces him to do so twice a month, but that costs him the price of his dinner, and there is for some reason no corresponding saving at home."

(The mind probably switches off on to another controversy. One purely domestic, which can have no place here.)

"He certainly likes the Mess. It has happy memories of his pre-marital days. A good show and one to be proud of. He remembers stepping into it when he joined and found a comfortable, clean and well-furnished home. Everything going smoothly. Wholesome food and all that. Of course he didn't realise then that it was being kept up partly by harassed married seniors."

"He rather wonders what he would have done if there had been no Mess. Lived in a hotel perhaps or chummed in with old Snooks. Awful thought! Snooks *would* play the piano all day. Besides he would have had to put down a lot of money for furniture, crockery and so on. Of course he could have gone into that chummery with

the Policeman and one or two others, but it would not have been quite so comfortable or so friendly as your own Mess. Besides it would not have seemed like joining the best regiment in the service."

The pipe is now drawing well, and Mr. Think has come into the room and has linked arms with Mr. Feeling. Our harassed friend as he watches the smoke slowly curling upwards seems to listen in to a conversation between the two.

"It is all sentiment, rotten sentiment," says Feeling. "Everyone is talking of economy and yet keeps up an expensive and quite unnecessary Mess. Other nations manage very well without Messes. Why shouldn't we?"

"Because, my lad, most of our institutions are the result of experience and we find a definite value in Mess life." Mr. Think's voice is slow and measured. "In India the climate and oriental influences sap energy and lead to slackness. The mild discipline of a Mess gives a useful stiffening to the moral fibre."

"A fat lot of stiffening you get in a Mess with only three or four youngsters in it!"

"Not so. The very donning of Mess kit, often uncomfortable and irksome is a stimulus. No chance of 'dining dirty' in a Mess. Moreover, dinner is a parade and punctuality being necessary one can't be slack. The very formality of apologising to the President at table (although he is often junior) is most salutary. The unwritten laws of Mess life under which certain subjects of conversation are taboo and perhaps certain regimental customs observed, all have a useful effect."

"My dear old prude, you make me feel tired. What about our civilian brethren? They seem to be quite full of good manners and grit without all this discipline."

"Touché! But remember that they generally come out to the country older and a lack of this discipline is less observable and matters less in the kind of life they have to lead. The army is founded on discipline and if you haven't got it among your officers you will not have it in the ranks. As above, so below."

Mr. Think continues. "In the past the commissioned officer has been drawn from a community brought up in a tradition in which self-discipline has had a very high place. Mess life helps him to keep

up the standard. Without in any way wishing to decry the character of the young Indian commissioned officer of the future, it must be allowed that many of them will not during their youth have been subjected to the same disciplinary influences. I claim that Mess life will, in their case, be a necessity."

"Well! You spilt a bibful! But, me lad, you are off the rails. I'm thinking of regiments with mostly married officers, just like the new Indianised regiments will be."

"There are times of the year when married officers are separated from their families," Think replies. "The hot weather for instance. The Indian commissioned officer will not always have his family with him. At such times a Mess is a boon. They get in touch with their brother officers in a way that is normally impossible. Let me remind you too of the many weeks of the cold weather during training when in camp. You must have a Mess *bandobast* for that."

"Now, don't tell me that you need keep up an expensive permanent Mess just to keep a camp mess going for a few weeks. You, in your cold calculating way, must realise that the cost of a permanent Mess isn't really balanced by the practical value received; at any rate to the married man."

"I, in my cold and calculating way, realise that there are more things in this life than money and finances. *Esprit de corps* is often born in a Mess which belongs to all, is probably a source of pride, and in which find place the records, souvenirs, and a thousand traditions which cement the regimental spirit. Besides this it provides a means of direct contact between officers of the unit which cannot be found on the parade ground, in office or in the lines. We are passing through a financial crisis which is liable to warp our judgment. There are greater things than money or even than solvency."

"Man's nature will out and he will entertain. A Mess gives the means by which a regiment (which is a definite entity in the social world) can entertain its friends economically. If such entertainment fails to be economical it is the fault of the officers and not of the Mess system."

"But, good heavens man,———"

"Allow me to conclude. Other regiments make friends and gain contact by a call on the Mess. Such a call could no doubt be made by a visit to the other unit's Orderly Room or by dropping a card on

the Quarter Guard. One might go further and publish a friendly notice in regimental orders. How does that strike you, my emotional friend ? "

" It strikes me that you are talking a lot of tripe. The point is that Messes are a confounded expense and something ought to be done about it. The simplest plan is to scrap the lot."

At this point our friend, the British body, as he knocks out his pipe realises that a few years hence he will be the ' Father and Mother ' of his regiment, and therefore responsible for the welfare of his young officers. Nothing can absolve him from this duty. He knows well that a young officer in debt is not a good young officer. The Mess and its accounts give a Commanding Officer a hold over his officers which is obviously necessary.

Mr. Action suddenly appears on the scene.

" Well, you two ! You have been holding forth a lot. What are we going to do about it ? I suggest that as you consider the Mess a necessity and that it is too much of an expense, we go along and cut the thing down somehow."

Mr. Action strongly supported by Mr. Feeling (whose mind is still on the Mess bill) and steadied by Mr. Think, takes charge of our British body who makes his way over to the Mess.

" Here you are," says Action. " Look at this. Daily messing averages Rs. 3-4-0 ! They are either a tribe of sybarites or else the Mess Secretary doesn't know his job. Cut it down."

" Hear ! Hear ! " endorses Feeling. " Why should an officer who has thrived on public school fare and the simple meals of the average English home suddenly find it essential to live at Ritz scale and have half a dozen courses for dinner ? Pure swank."

" Excuse me butting in " says Think, " but surely the standard of messing affects only those who live in the Mess. If they are satisfied with wasting money on food it need affect no one else."

" Wrong ! " bursts out Feeling. " The married man has to dine in and often live in and he is affected."

" All right." Action takes out his note book. " You can't expect a youngster acting as Mess Secretary to know much about the subject. He accepts what he finds. The wives are always comparing notes about their house keeping. Do you ever hear of Mess Secretaries

doing it? No. Very well get down to it and form an unofficial committee in the station, of Mess Presidents and Secretaries. No doubt whatever that they would all benefit." Action makes a note of it.

"Without wishing to trespass in your province, Action, I suggest that only those fellows who have a taste for the work be made Mess Secretaries." Feeling mildly remarks.

"Wrong! No young fellow has a taste for it but they all have to do it in due course and very fine training for them it is. The man with the most knowledge is the senior married man."

"Right!" Action makes a note. "Mess President to be senior married man. Job to chase Mess Secretary. Now, what next?"

Feeling looks round.

"Can't something be done to cut down this mass of useless silver? It costs a mint to insure, clean and move about when changing station. Most of it is never seen and certainly not used from day to day."

Action whips out his notebook.

Think interposes. "I suggest that in part the same applies to furniture. The cost of moving it is heavy and each move takes years off its life."

"Right! Cut down silver to essentials and valuable relics. Furniture to remain in station and be handed over to incoming regiment. Next please."

Feeling and Think speak simultaneously.

"I suggest something less lavish in the matter of crested crockery and glass. Expensive to buy and replace. Why also this passion for very highest grade crested notepaper in the Mess? It all adds to expense and is definitely a pure luxury."

"Let me get that down. Standard crockery and glass to be adopted in all Messes. To be handed over on relief, *i.e.*, no breakages in transit and no transport charges. Wish I could get the contract for the army." Action sighs. "Oh, yes, and crest stamp on Mess writing table. Costs about £5. You can stamp the crest on the paper as you use it."

Think scratches his head. "Many married people have given up expensive table linen. You know what *dhobies* are. Couldn't we do a saving in linen?"

Action pounces at once. "Right. No table linen. Give Mess servants something to do to keep tables in order."

Feeling is roused. "What about this cloud of servants, orderlies, and clerks in the Mess. Something wrong there. The average Mess only has about four rooms and for waiting at table there are private servants. The greater part of the day Mess servants have nothing to do. Surely something could be done to deal with the rush hours. The trouble is that our luxurious bachelors, who probably clean their own shoes at home, have to be valeted and cosseted like invalids out here."

"I have only one suggestion here," says Think. "It is that it should be an accepted principle that cooks' wages are included in the cost of the daily messing. It is definitely unfair to charge to non-dining members a share of the cooks' wages."

"Noted," says Action, "but we don't seem to have achieved much. I thought that large Messes paid better than small ones. What about combined Messes—Station Messes?"

"On purely financial grounds station messes would be an advantage, but, as I said before, there are other things besides money. You will not gain financially what you lose in *Esprit de Corps* and other indefinable influences which count for most in the army."

At this point our British body finding the hour late returned to his bungalow. On the verandah was his better half.

"What does this mean?" said she, waving a letter. "Here is a note from the Mess saying that you have been appointed Mess President for the next quarter. How can they expect a married man to do it? You will refuse of course."

III

"AMEND THE MESSING."

Some Hints on Catering.

By 'An Addict.'

By popular tradition, and ancient custom, the Catering Member, in those messes where the catering system is in vogue, is he who in an unguarded moment has complained more openly than his seniority warrants of the aqueous properties of the milk, or of the capricious nature of the mutton. Consequently one can, at the most, assume the

Catering Member, who is normally the junior member of the Mess Committee, to be possessed only of those qualities, which at the outset, will ensure a change, and which, if developed strongly, may make for improvement.

At the moment of his appointment he is supported by the disillusioned hopes of the senior dining members who are audibly certain that no change can be for the worse, and by the facetious remarks of the juniors now free of the uncertainty which always prevails until the Mess Committee is actually appointed. At the outset the victim must realise the impossibility of obtaining complete success, where so many have failed (and here I would request that the Catering Member be not encumbered with the clerical work in addition to his catering duties). With one menu, within the confines of one Mess table, to appease the crusted liver of the senior dining bachelor, to fulfil the epicurean ideas of the married major temporarily doomed to a bachelor existence, to answer the cry for cheapness of the married captain similarly situated, and to soothe the bleat for brighter living of the young irresponsibles, demands innate skill, vast experience and considerable seniority, but having discovered that economy is the lowest common denominator of these various elements, he will have placed his foot on the first rung of success.

The duties of catering divide themselves into two main sections :—

1. Khansamah and Menu.
2. Stores and their issue.

Khansamah.

No khansamah is perfect ; he works to make a living ; but he is a man who values his *izzat*. At times even the Colonel's wife has to apologise for a spoiled joint or sweet. Every khansamah has his good dishes and his inferior ones. For example at a hostelry in a large Hill Station, the khansamah is famed for the general excellence for his cooking, but dixie stew is as lamb compared with the toughness of this khansamah's plain stews. Again, most memsahibs, even if they cannot demonstrate the making of a dish, can detail the ingredients and in case of failure point the cause. On the other hand the Catering Member is handicapped when dealing with the menu by his complete ignorance of the quantity of ingredients, which compose even a simple dish and of their mixing and preparation. He can normally be expected to devote to the khansamah only about thirty minutes after

breakfast, supplemented by occasional visits to the cookhouse. That being so, it is obvious that the " teach the cook " attitude is from the outset doomed to disaster. In like manner the " fine the cook " attitude is bound to lead to retaliation.

The Catering Member will best proceed by obtaining from the khansamah a list of the dishes he knows, and then, commencing with the most simple, discover his reliable ones. When a failure occurs, it is useless to accuse the cook of stealing the cream and substituting flour and water ; a far more effective weapon is the plain statement that the dish was a failure, combined with an expression of pained surprise at the inability of so good a cook to produce so simple a dish. Reasons for failure should then be demanded and promises of future improvement will certainly be given. In the case of repeated failure ostentatiously erase the dish from your list until such time as he petitions for a further trial. When an invitation to dinner liberates you from attendance at Mess, note the quality of the bazaar food, and any new dishes, or better cooked dishes. Next day enlist your khansamah's co-operation in discovering the cause of the apparent differences in the quality of the bazaar stores, and the comparative ability of the two khansamahs. Yours will readily respond to such handling.

There are however certain matters, concerning which one can with safety insist on an immediate and considerable improvement :—

i. The quality and prices of the bazaar stores, such as meat, fish, fowl and eggs.

ii. The quantities provided.

iii. The arrangements for preparing, cooking and serving the food.

Improvement in quality and decrease in prices charged can only be obtained by personal visits to the cook house, the market, by the co-operation of the Mess havildar, and by seeking the assistance of a knowledgeable memsahib. A Mess khansamah is in a favoured position compared with a bungalow khansamah, as his orders are on an average much larger and more regular. Inferior meat, etc., should never be accepted and one is on safe ground in dismissing a khansamah who cannot, or will not, buy absolutely fresh first class bazaar stores.

A khansamah will always, if not checked, produce far in excess of actual requirements. Make him show you exactly how he proposes to apportion a joint, etc., and when the meat, etc., appears on the table estimate the amount actually consumed. Here again frequent inspections and the reference of matters to a memsahib will soon cause an improvement in your ability and knowledge and a decrease in wastage.

The khansamah must be made absolutely responsible for food from the fire, through the too inevitable hot case, to the Mess table. Normally breakfast and tiffin are running meals, the food usually given is of such a nature that each officer's breakfast or tiffin is an individual item. Prevent the cook from preparing at 7-30 a.m. breakfast for an officer who normally arrives at 9 a.m. If the dish is a communal one make him prepare two or three, so that officers have an equal chance of getting their food hot and unmutilated. To be the last officer at breakfast or tiffin and to be presented with scraps is unfortunately too frequent a source of acrimonious remarks. Eliminate the hot case from these two meals and substitute a grill system and you will have accomplished much.

Stores.

You will speedily notice that demands for biscuits, tea, coffee, sugar, pepper, marmalade, Force, etc., from the khidmatgar, and sauces, cooking oil, vinegar, etc., from the khansamah are met immediately without question by the Mess havildar, who issues full bottles, packets or tins. Similarly milk, butter and bread are issued entirely on the requirements of the khidmatgar and without any reference to the actual needs of the day. It requires little imagination to follow the travels of, say, an unopened tin of Cocogem, or bottle of sauce through the cookhouse, where excellent substitutes can be made by the khansamah himself, to a shop in the bazaar.

The Stores Issue Section of the Mess, is a Detail Issue Section. The Catering Member must discover the life days of each article of stores expressed in terms of messing numbers. No unopened stores and packets should ever be issued, and where possible only the actual requirements of the day or meal. Similarly an estimate can be made of the average amount of milk, butter and bread eaten per officer per day.

For stores, the Mess havildar should keep a chart showing lists of stores issued, dates issued, and messing numbers involved. The daily order of milk, etc., can be entered in the khansamah's daily bazaar account, when he also can be asked for his requirements of these articles, and his needs checked against his menu. No independent purchase by him of these articles should be allowed.

To lay down a scale would considerably extend this essay, but if a principle of trial and experiment be adopted and the Mess havildar be trained to see that methods and improvements are really carried out according to your instructions, the Catering Member will in a short time produce his own scale. Personal observation will further reduce this and result in a very considerable economy indeed in items in which there are normally excessive wastage and pilfering. As an example of the efficiency of this method, I may quote the bread bill of my Mess. On a basis of slice issue, by the Mess havildar, the bill was in one month reduced fifty per cent. of the amount paid when whole loaves were issued on demand, and no messing member complained of a shortage of bread.

No Catering Member can achieve complete success, but the above system if forced with a gentle but firm hand will achieve at least two definite results :—

i. Avoidance of badly cooked and badly served dishes.

ii. A large reduction in the cost, without any lowering of the standard of messing.

Merely to have reduced the cost will ensure your promotion to the ranks of those who have achieved greatness—and certainly result in your being granted an extension of the appointment. If you have succeeded in cajoling the cook into preparing in a palatable fashion those dishes for which your brother officers generally show preference, you will be so inoculated with the virus of catering that you will yourself request an extension.

THE SUPPLY AND TRANSPORTATION PROBLEM OF FUTURE ARMIES.

By Major B. C. Dening, M.C., R.E.

With the amount of mechanisation that is contemplated and actually taking place in armies to-day, and the creation of rapidly moving armoured formations, it is a little difficult to visualise how the supply and transportation problem is to be met under the new conditions. The following pages are an attempt to grapple with this difficulty :—

The form, size, and radius of action of future armies.

Before it is possible to discuss the supply problem, it is necessary to define to some extent the probable shape armies will take.

Speaking of civilised theatres of war, the Director of Staff duties at the War Office stated not long ago,

"The armies of the future will consist of formations similar to those we have known in the past, but made more mobile by the provision of M. T. which will be more efficient and rapid. In addition there will be armoured formations whose degree of mobility will be greater still."

In other words, it is necessary to visualise two types of army :—

(*i*) *the marching army*, governed by the marching power of men, even if much helped by M. T. ;

(*ii*) *the wholly mechanised army*, small in personnel and capable of rapid movement over great distances.

It is clear that only a fraction of the forces in the field will be wholly mechanised. In peace no nation can afford to keep large mechanised forces and their creation in war is limited by many factors. From the official publication "Mechanised and Armoured Formations 1929" it appears that wholly mechanised forces are likely to be organised into light or medium armoured brigades built up of all arms. A medium brigade is shown to contain some 1,900 men, 130 wheeled vehicles and 190 tracked vehicles. As no nation as yet possesses even one armoured brigade, if we can supply a formation of that type, it is likely that the problem for some time to come has been largely met.

The radius of action of mechanised formations, is limited by the medium tank units. According to the publication referred to above (p. 11), such units may be expected to travel as a maximum 300 miles in a week.

The dependence upon Transportation Systems.

Existing land forces, operating as they do mainly upon the principle of obtaining the necessary power in the field from man-power and artillery fire, are dependent upon a transportation system for the following :—Rations, forage, ammunition, petrol, engineer material and water. Without any one of these, operations are brought to a stand-still. The large numbers of men require a large ration supply. The presence of cavalry involves carriage of grain, assuming hay locally available. Artillery bombardments absorb vast quantities of ammunition. The movement in front of railhead of so many supplies necessitates quantities of petrol for M. T. and quantities of engineer stores for the up-keep of communications.

Fully mechanised land forces are dependent upon a transportation system for one main requirement—petrol, and in lesser quantities, for food, ammunition and spare parts. Compared to existing land forces of equivalent fighting power, they require far more petrol but comparatively negligible quantities of rations, forage, ammunition and engineer stores, for they have few men, no animals and do not require heavy artillery bombardments. The petrol supply, however, can never be allowed to fail, even for one day, without completely stopping operations. Fully mechanised formations are also vitally dependent upon a regular supply of oil and lubricants and upon a workshop and repair organisation.

Where mechanised forces are in action, time and movement are important factors, in which one day's loss may prove decisive. With marching armies, a one day breakdown in supply arrangements will not have decisive consequences as regards food though one day's loss of ammunition may prove fatal.

Future Developments.

Aircraft hindering supply.

Against civilised nations in future no supply service can be organised without due consideration of the effects of interference by hostile aircraft. It is obvious that the magnitude of the air

forces built up in the last years of the Great War can be greatly exceeded and that the effects of bombing, especially if gas be used, already serious enough in 1918, may become decisive unless measures are taken to counteract them.

According to the methods which have sufficed in the past, a British Army operating overseas commences by establishing a base at a suitable port. Very rapidly such a base is extended to a great size, to contain the large reserves of supplies, ammunition, petrol and fuel, the field bakeries, workshops, base camps, etc., necessary for an Army in the field. To save labour, all these establishments are organised as near as possible to the docks, landing wharves and railway sidings. From the hostile airman's point of view the result is to offer a compact area as a target which it is hard to miss with a bomb. From the base usually one main railway line forms the artery of supply to any one Army in the field, such an Army being fortunate if it possess two or more railway routes as alternatives. Along the main railway routes are congregated the advanced supply depots, the reserve ammunition dumps, the rolling stock sidings where the intricate daily marshalling of trains takes place and the junctions and bottle necks through which the Army's whole supplies pass. All these offer excellent targets to bombing, lying as they do along a well defined route and being mainly of appreciable size. The explosion of an enormous reserve ammunition depot in one case and the disorganisation of a whole railway system for some days in another were actually caused in the late war by the adroit dropping of a single bomb. Further forward, where railway facilities within reach of the troops are limited, as even in France they were, it is often inevitable that one railway station has to serve as railhead for a large number of formations. The consequent accumulation of M. T. at that point and the congestion in traffic again offer a favourable objective to enemy aircraft.

The size and rigidity, then, of the existing supply system are some of the weaknesses to be overcome in organising the system of the future against a civilised enemy. In semi-civilised countries it will be unwise to assume that the enemy will obtain no aircraft assistance. At the same time many of the dangers from the air enumerated above will be considerably minimised.

Aircraft aiding supply.

The possibility of aircraft aiding supply must not be overlooked. Where the requirements are the regular delivery of limited quantities of some article such as petrol, heavy transport, aircraft may prove of the greatest assistance. Individual aircraft have already carried 100 passengers. There are many to-day capable of carrying 5 tons. To supply a Medium Armoured Brigade with one day's petrol rations and mails twelve 3-ton lorries are required. These 12 lorry loads represent 7 or 8 aeroplane loads. The supply of a mechanised force by air under suitable circumstances is thus eminently practicable. There has already been the example of a force of 1,400 men 850 animals moving cut from Dargai, and being supplied for some days from the air alone, though in this case supply on the plains only was considered practicable by this method.

Enemy mechanised forces hindering supply.

A further factor requiring consideration is the possible effect of hostile mechanised forces upon a supply system. It may be assumed as far as the larger marching portion of the Army is concerned, that it will secure its supply system at least at the start of a campaign, by a line or a ring of defences covering its base, which are normally impenetrable by hostile mechanised forces without a bombardment or a regular assault by all arms. As the marching Army moves forward, however, and certainly when the mechanised portions emerge for independent operations, it appears more likely in countries of average terrain that the Army will be able only to create successive limited areas safe against attack by A. F. Vs. and will be unable to make the whole of the rear areas secure for the movement of supplies. The mechanised forces of the enemy may then well be expected to attempt raids on the supply system against which provision will have to be made. Movement of supplies by night will to some extent afford protection against interference.

Railways versus M. T.

Future developments in the civil use of railways and M. T. respectively are of the utmost importance in considering future transportation systems in that military methods must follow civilian practice for a number of obvious reasons.

In the United Kingdom in recent years there has been an extensive increase in the use of M. T. at the expense of the railways.

Even heavy bulky loads are now moved by roads rather than by rail. This tendency may however be misleading. It can be attributed in the United Kingdom partly to the comparatively short distances involved and partly to the obvious advantage of direct movement of articles from the place of manufacture to the place of delivery without intermediate handlings. But over really long distances, movement of large and heavy stores will for many years be more economical by rail than by road. In, for instance, the most classical case of the employment of a railway for the maintenance of an army, namely in the use of the Siberian railway for the supply of the Manchurian Armies in the Russo-Japanese War, no one could conceive M. T. replacing the railway even if M. T. had existed at that date. Not only long distances but defiles such as mountain passes and river crossings may be more profitably crossed by rail than road transport. Nevertheless the elasticity obtainable from M. T., particularly cross-country M. T., the power to switch it at will, and the ability to travel on a series of alternative routes in face of a hostile air menace, are such important military factors that the possible application of M. T. should be constantly reviewed, even if existing civil reserves of cross-country M. T. are still very small. In mechanised forces the flexibility introduced by M. T. to the transportation system is of particular advantage. It enables the problem of movement away from fixed lines of advance to be met. In semi-civilised countries, where railways are likely to be largely absent, M. T. will be especially valuable.

On the use of railways, the "Manual of Mechanised and Armoured Formations 1929," p. 40 states:

"Mobile formations will of course use the railways as much as possible for their supply, but the mobility of these forces is such as to make it extremely difficult to repair a railway system in time to be of value."

For the operation of railways a settled area is required, otherwise accidents and delays, due to improvised organisation, apart from enemy action, will be frequent."

The special problem of Petrol Supply.

A further point to be considered is how any extensive petrol supply is to be organised. Is petrol replacement to be regarded as

akin to ammunition replacement or to that of food supply? In the case of ammunition, the guiding principle is to keep echelons full; at certain quiet periods no ammunition is sent up and at others large quantities are despatched to certain units that have had heavy usage. In the case of food supply, a regular daily stream of rations goes up, which is checked for certain formations if they should happen to lose heavily in battle. The essential difference between the two methods is that in the case of ammunition it is abnormal for replenishment to be required at all and when required, it is needed irregularly throughout the units whereas in the case of rations it is abnormal for replenishment not to be required and for the needs to be irregular. The question with petrol then is, is its usage likely to bear greater resemblance to the consumption of ammunition or to that of rations? The answer would appear to be that in the case of M. T. with marching formations, much movement and use of petrol will be abnormal and irregularly applied to units and that replenishment should be on the ammunition method but that with wholly mechanised forces considerable movement, (admittedly only for short spells as governed by exhaustion of personnel, etc.) will be both normal and universally experienced by the units in the force, with the result that there the ration replenishment method is the better. In other words, for mechanised forces there must be a regular stream of petrol of almost constant magnitude passing up the L. of C. at all times to units. As will be seen presently for special periods, as has been done in the past with rations several days supply may be carried at one time by the actual consumers. But this does not affect the principle that there should be a regular stream of supply at all times further back.

A possible solution.

Even in the future, the supply problem will require to be regarded in three parts, *e.g.*, in the base, on the L. of C., and in the Operation Zones.

The base zone against civilised nations will require selection as far away as possible from enemy aerodromes. For fear of air and gas attack its lay-out may require to be the reverse of that in the past, *i.e.*, wide dispersion of base depots, etc., may be necesary, to deny any considerable target. In semi-civilised countries with little or no air menace the base area may for convenience be closer and contracted.

The L. of C. zone will generally use railways if available until within effective range of enemy aircraft. From that point, if in the presence of a strong hostile air force, it will be advisable to supply by M. T. *along a number of alternative routes.* With tracked or six-wheeled vehicles these routes can be largely cross-country tracks. With no railways, M. T. from the base area is necessary—assuming, as is reasonable in any theatre in which large forces are to be employed that the country is mainly open.

In the first two zones the future supply problem can be visualised. Even beyond that in the Operations Zone it will not be difficult to work out the supply of the marching portion of the Army, which will be much as in the past. It is the supply of the mechanised portion in the Operations Zone that presents the real difficulty.

Supply in the Operation Zone.

In this zone, mechanised forces, if their mobility is not to be curtailed, must be free to move in any direction up to 300 miles in a week and have regular replenishment. Can they do this and can they go farther, say 500 miles ?

Now a mechanised force on leaving its advanced lines may be moving in various sets of circumstances. In case " A " it may be advancing in conjunction with a general advance of the marching portion of its army, with tasks perhaps such as were given to the cavalry in the final advance in Palestine, *e.g.*, harrying the enemy's retreat, preventing the forming of a new line, seizing vital points, etc. In case "B ", it may be impracticable for the marching army to move at all and the mechanised forces may be operating alone as a raiding force with restricted objectives. Thirdly, is it possible to have case " C " in which the mechanised forces are used as an independent army moving upon a distant objective ? For the moment, let us assume that it is possible.

In case " B " the supply of the mechanised forces presents few difficulties as those forces will return to their lines after a definitely limited period for which special provision can be made.

Case " A " is again easier than case " C " in that in the former the source of supply for the mechanised forces, *e.g.*, the marching army, is following up, even though the mechanised forces each day may be travelling further out of touch.

Case "C" is obviously the most difficult and if a solution to supply in that case can be found, it will be applicable to cases "A" and "B".

The protracted supply of an independent mechanised force.

A mechanised force such as an Armoured Brigade, on marching off to action, carries with the unit in "A" and "B" echelons sufficient petrol and oil for each vehicle to run up to its circuit of action, fresh food supplies for one day, ammunition for one day's fighting, and reserve rations for two to three days. Each Armoured Brigade is fed by a section respectively of a Supply Company, Baggage Company, Ammunition Company and by a Maintenance Company, all of the R. A. S. C. The Supply Company section carries one day's supplies, and petrol and oil for the brigade to move 50 miles and the Maintenance Company behind carries the same. Ammunition sufficient to meet probable expenditure in action is carried in two echelons, *e. g.*, in the Ammunition Company and the Maintenance Company respectively.

With the existing organisation then, mechanised forces have supplies carried in front of the railhead or head of the L. of C. for three days, a distance of 150 miles.

Diagram "A".

In the diagram attached an attempt has been made to discover the possibilities of supply to an independent mechanised force. A possible situation has been drawn in which the marching army has reached a line C1 C C2 from which the mechanised forces are to operate against a distant railway junction, "O". (Aleppo, in the Palestine or Mesopotamian Campaigns offered the same situation). The mechanised forces might consist of numerous Armoured brigades, but if the case of one such brigade be followed through, the solution of its supply problem will be applicable to the remainder. Now there would appear to be two methods by which an attempt might be made to supply an Armoured Brigade under these circumstances, one which might be described as the Normal Method, dependent upon the use of a string of Maintenance Sections, the second the Convoy Method, based upon the employment of convoys and a series of advanced bases.

The Normal Method.

This is called the normal method because it would be normal in the case of a marching force advancing far beyond its railhead.

Taking by this method a medium Armoured Brigade as starting at 23·59 hrs. on "Z—1" day from C at which supplies of all types have been concentrated, it will have with it rations, petrol and oil, etc., for Z day in unit vehicles.

By the end of Z day, the brigade reaches "D", an advance of 50 miles.

In normal warfare, the sections of the Supply Company would come up from refilling point and hand over to unit vehicles at "D" supplies for Z+1 day on the evening of Z day. Here passing through hostile territory, the supply sections would presumably march with the mechanised force in order to take advantage of its protection. For Z+1 and subsequent days, as far as supply by this method is concerned, two conditions must be fulfilled. First, the sections of both the Supply and Maintenance Companies must have sufficient escort to enable them to move independently of the Armoured Brigade. Second, the sections of the Supply Company cannot go back far, if at all, to meet the Maintenance Company, if they are to catch up the Armoured Brigade that evening with the next day's supplies. On these assumptions, on Z+1 day, the Armoured Brigade will reach "E" the Supply Company sections will remain at "D" until the Maintenance Company reaches them and refills them and then will move off to catch up the Armoured Brigade. The Maintenance Company will have started from "C" very early on Z+1 day to reach "D" as early as possible. Having handed over its supplies it has to prepare for next day's task. This will be to start early to refill the Supply Company at "E" again as early in the day as possible. On Z+1 day then it cannot afford to go right back to "C" to refill. Probably it will have to wait at "D" while another No. 2 Maintenance Company sends up from "C" to "D". Since the first Maintenance Company wishes each day to leave, as early as possible, it will have to be reached by No. 2 Maintenance Company probably on the previous evening. For each 50 miles stage then it is necessary to add a portion of Maintenance Company. If we take the case when the Armoured Brigade has reached "I" on the evening of Z+5 day, the Supply Company and series of Maintenance Companies are as shown in the diagram.

Now, the question is, is this method of supply feasible at all? There are several matters requiring further consideration. The first is to what extent will fresh maintenance units be available for superimposing each day on the tail of the system? The ration and petrol section of a Maintenance Company for a medium Armoured Brigade contains 12 lorries, the Ammunition Section 13 lorries. Unless continually in action which is unlikely it is only the 12 supply and petrol lorries that need to be added with each 50 miles stage of the advance. For one medium brigade to advance 300 miles, allowing one stage as met by the Supply Company some 60 lorries would be necessary. Compared to the 317 vehicles in the brigade itself, this figure does not seem impossible, though there must clearly be a limit to supply by this method.

The second point is whether an economy in maintenance units could not be effected by asking each unit to do more than 50 miles per day, *e.g.*, while the stages for the main body were 50 miles per day, those for supplies might be 75 or even 100 miles per day. How far such assistance can be obtained will depend entirely on the nature of the road or track forming the main avenue of advance. If reasonably good, supply vehicles can obviously be economised, and echelons cut out.

The third point is that though by this method stages of 200 to 300 miles could be dealt with, the whole objective distance could not be, without intermediate halting or staging places, if only to meet exhaustion and maintenance difficulties.

The fourth consideration is how far in hostile territory it will be possible to protect supply units. Clearly if strong parties of the enemy are free to operate the method is not feasible at all. If the local enemy is weak and the main enemy surprised or in confusion, possibly sufficient escort may be found. In view of the distances involved, any scheme of picketing the route other than at defiles, etc., is impracticable. We are left with the conclusion that unless the possibility of a strong hostile force cutting in behind the main mechanised forces is remote this method of supply is dangerous.

The Convoy Method.

The possibility of this method is based upon the principle that the main mechanised force will advance in bounds halting and establishing an advanced base at each bound, and carrying with it all requirements for that bound, the length of the bounds depending partly

upon the terrain and the distance to the objective and partly upon the nature of the enemy. If the enemy be possessed of strong forces capable of delivering strong attacks upon convoys, then the bounds must be shorter and the series of advanced bases closer together. Obviously as few advanced bases as possible should be used, as they have to be built and defended.

In considering this method it is interesting to examine the practice of the Navy in dealing with a similar problem. A fleet operating in distant waters presents an analogy, if not an exact one. If we take the case of the British Fleet sent out for the Dardanelles operations, we find it advanced from base to base, *e.g.*, by Gibraltar, Malta, Alexandria and that it was supplied by escorted convoys using these bases as havens of refuge. Should a British battle fleet be required to fight (say) in Chinese waters it would continue advancing in the same method, supported in succession by Aden, Ceylon, Singapore and Hongkong. While in the case of fleets, there is less choice in the selection of advanced bases, mechanised armies can make them almost any where. On the other hand, there is the important difference that fleets usually go to already defended havens of refuge, while armies have to make their defences on arrival.

It may here be asked why, in order to take advantage of the protection offered by the fleet or mechanised force, supply ships or vehicles sufficient to replenish the force right through to its destination do not accompany the force from the beginning, avoiding the use of convoys until the objective has been reached. While this is possible, the objections to it are that for a really long advance the ships or vehicles may not be available and that the string of supply transport behind may prove unwieldy and a fatal hindrance to the fighting force in battle.

Reverting to the attached diagram and the advance of a medium armoured brigade, if the enemy be weak it might be assumed that the mechanised force could advance 300 miles in the first bound, from "C" south of the destroyed railway, to "P" where a fortified advanced base could be formed. It would involve perhaps 80 maintenance lorries being added to the 317 vehicles of all types in the brigade. This distance is convenient in that mechanised forces in their present state require a day at least to refit after 6 days marching. It would then be necessary for the brigade to remain at "P"

until its first convoy reached it. The convoy should travel far faster than the brigade, how much faster depending mainly upon the state of the road or track. The speed of the advance of the armoured brigade beyond " P " is here controlled by the speed of the convoys. The first convoy, by starting soon after the mechanised force, could arrive at " P " almost as soon as the force itself and after one day's delay, the force with its lorries refilled for a further 7 days could advance once more upon " Q ".

From that stage, it would be the endeavour of the supply organisation to make " P " fulfil the functions hitherto met by " C," *i.e.*, to make " P " the jumping off point for further convoys. If the amount of M. T. permitted, no doubt a series of convoys could follow the first and fill up " P ". In any case, knowing that the convoys can travel a good deal faster than the fighting force, even if several days are required at " P " before the 2nd convoy set off to " Q ", the latter should normally reach " Q " as soon as it is required. By this method there would appear to be no reason why the mechanised force should be delayed by its supplies.

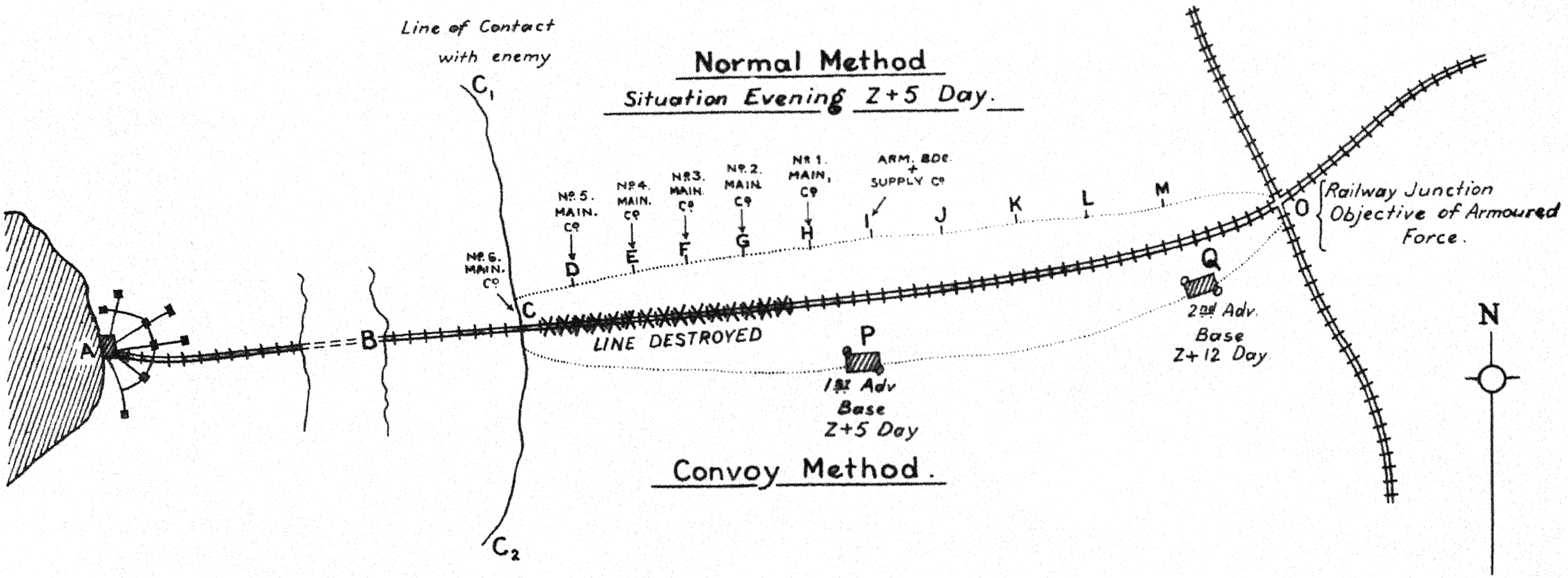
Protection in the case of this method would be provided much as in the other method of supply. Here, however, there is one larger convoy to be covered instead of a series of smaller columns. The problem is in some respects easier and in others more difficult. According to the type of attack expected, so the advanced bases would need to be fortified and garrisoned, and especially perhaps against air and gas attack.

The two methods compared.

The normal method has certain advantages. Up to a limited distance it is quicker than the convoy method. It obviates the need for carrying up the materials, garrisons, etc., for the advanced bases. Particularly where the mechanised force is not intended to remain at the objective, the normal method is more economical in M. T. and more flexible. Its smaller columns offer less of a target to hostile aircraft.

The convoy method, however, offers greater security. In the face of strong hostile force, by establishing bases at sufficiently close intervals, the advance can be consolidated to a large extent. The method is capable of exploitation to great distances. If enough

Diagram "A" to show whether the Supply of an Independent Mechanised Force is possible. (up a poor road or track).



NOTES :—1. Normal Method above railway, Convoy Method below railway.

2. Range of land based bombing aircraft is about 300 miles to-day. Against a strong airpower, the railway can be used from A to B provided BC is 300 miles. "B" is then railhead. Against a negligible airpower "C" is railhead. Even if "B" is railhead, "C" should be made L. of C. head by M. T. columns between "B" and "C".

3. D, E, F, G, H, I, J, K, L and M indicate 50 mile stages on route to objective.

4. In semi-civilised countries with no railways AC would be covered by M. T. columns and base need not be dispersed.

M. T. is not forthcoming, this method enables use to be made of aircraft. If the bases are sited near landing grounds, they can be kept filled to a large extent by aircraft. Aircraft also would provide a reserve of transport when the convoy route had been interrupted by the action of the weather or the enemy.

With mechanised forces as already stated, an elaborate workshop organisation is necessary as close behind such forces as the tactical situation will permit. The convoy method of supply offers in its advanced bases an opportunity for the erection of a series of workshops and the issue of spare parts.

Conclusions.

The important conclusion at which it is desirable to arrive is whether case " C " (prolonged movement of an armoured force independent of its marching base) is feasible or not, or whether only case " A " (advances *with* the marching army) and Case " B " (raids) are possible. The diagram, and discussion thereon, tend to show that there are great difficulties in maintenance in Case " C " whichever method of supply be employed, in fact that for the present it is necessary to restrict the possible use of armoured forces to case " A " at most. This does not alter the fact that in war Case " C " may be the decisive requirement and the one which at short notice may be badly wanted. It behoves in peace to see if its difficulties can be overcome.

These difficulties are clearly due to the problems of protecting the communications of the armoured force and of providing sufficient suitable M. T. Perhaps a conjunction of air and land transport will give a solution. It is important too, to remember that for very many years, armoured forces, though powerful, will be limited in size.

It is interesting to surmise the effect of the action of armoured forces, employed under Case " A ", " B " or " C " in the Palestine or Mesopotamian Campaigns. This question opens up too long a discussion to be attempted here, but indicates thoroughly the above mentioned difficulties.

MANCHURIA—THE BACKGROUND OF THE PRESENT FAR EASTERN CRISIS.

By Major B. R. Mullaly, 10th Gurkha Rifles.

Manchuria, called by the Chinese The Three Eastern Provinces, comprising as it does the three provinces of Fengtien (Mukden), Kirin and Heilungkiang, lies at the north-eastern extremity of China. It is bounded on the north and east by Siberia, on the west by Mongolia and the Chinese Province of Hopei (Chihli), and on the south by Korea and the Yellow Sea, into which projects the Liactung Peninsula, at the extremity of which is the Kwangtung Leased Territory containing Dairen and Port Arthur, held by Japan on a ninety-nine years lease. Its area is roughly 360,000 square miles, its length from north to south a little over 1,000 miles and its greatest width from east to west about 800 miles.

The climate is severe and the cold in winter is intense. The greater part of the country is a vast plain, but in the north-west and south-east are ranges of mountains, the Khingan and the Changpai. It is in this great fertile central plain that the crops which are Manchuria's principal wealth are raised. The main crop is the soya bean which is used for a hundred and one different purposes and the export of which in 1929 amounted to nearly three hundred million taels in value. The resources of the mountain regions are as yet undeveloped but there are valuable forests and many metals are known to exist.

Outside a few large towns, metalled roads are unknown, and in winter the frozen rivers are extensively used as highways, but the main arteries of communication are the railways. There are three main systems:—

The Chinese owned Peking-Mukden Railway (Peking-Tientsin-Shanhaikuan-Mukden); the Japanese owned South Manchuria Railway with the Antung-Mukden Line (Port Arthur and Dairen-Mukden-Changchun); and the Russian owned Chinese Eastern Railway, the link in the great Trans-Siberian system (Manchuli-Harbin-Pogranichnaya and then on to Vladivostok) with its southern branch from Harbin to Changchun.

Note that the Chinese Eastern Railway is 5 ft. gauge and the others 4 ft. 8½ inches, so that there is a break of gauge at Changchun.

The population, which is now probably about 29 millions, of whom about a million are Koreans, 150,000 Russians and only about 200,000 Japanese, is expanding rapidly. In the past Chinese labourers have flocked north to work on the farms in the summer, many returning in the autumn, but for the last few years constant civil war and the frightful conditions prevailing in many parts of China, especially Shantung, have given an added impetus to this immigration, which has become permanent and is a striking testimony to the peaceful conditions prevailing in Manchuria as compared with China proper.

The history of Manchuria falls conveniently into five main periods:—

1. The early period, ending with the China-Japan War of 1894-95.
2. The period of Russian expansion ending with the Russo-Japanese War of 1904-05.
3. The period of Japanese expansion which was checked by the Washington Conference.
4. The period of Chinese competition with Japanese interests in Manchuria.
5. The present period when the destiny of Manchuria is once more being reshaped.

The original inhabitants of Manchuria were of Tartar origin and were regarded by the Chinese as barbarians. By the 12th Century they had grown sufficiently powerful to found the Chin Dynasty which ruled over the whole of North China until overthrown by the Mongols under Genghiz Khan. They emerged again in the 17th Century when they overthrew the Ming Dynasty and established the Manchu line which ruled China until the revolution of 1911. Shortly before the fall of the Ming Dynasty Russia began to make herself felt in Manchuria but made little progress until the middle of the 19th Century, when events in Europe made the strengthening of her Far Eastern possessions a matter of importance and, by clever diplomacy, the whole of the north bank of the Amur from the Argun fork to the sea was ceded to Russia.

The second period begins with the China-Japan War of 1894-95, in which the comic-opera army of China was ignominiously defeated

by the young Japanese army and China was forced to cede to Japan, amongst other things, the Liaotung Peninsula south of a line drawn from the mouth of the Yalu River to Newchwang. Russia, however, had secret designs of her own against the territorial integrity of China, and, together with France and Germany, "advised" Japan, in what was delightfully described as "a spirit of cordial friendship", to give up her well-earned gains on the grounds that this concession would jeopardise the peace of the Far East. Japan was not then strong enough to resist and was compelled to return the ceded territory to China.

Developments followed rapidly. For some years past Russia had been engaged in the construction of the great Trans-Siberian Railway and by 1896 it had reached the Eastern shores of Lake Baikal.

The Russians realised the tremendous advantage which would be gained by carrying the line straight across Manchuria to Vladivostok instead of continuing it in purely Russian territory along the Amur. To secure her object Russia entered into a treaty of alliance with China under which China was induced to agree to the construction of the Chinese Eastern Railway. Vladivostok is ice-bound for several months and Russia's eternal search for ice-free ports now came into operation once more and she obtained from China a lease of Port Arthur and Dalny (Dairen) and the adjacent territory with the right to build a railway from Harbin to Dalny. This, coupled with her aggressive policy in Korea, the fortification of Port Arthur and the great increase in the number of Russian troops in Manchuria, constituted a menace to the very existence of Japan and the Russo-Japanese War was the inevitable result.

By the Treaty of Portsmouth, as a result of her great victory in that war, the lease of the Liaotung Pensinsula and the railway from Dalny to Changchun were transferred to Japan, and in 1906 the South Manchuria Railway Company was formed, under the control of the Japanese Government, to take over and operate this railway together with the Mukden-Antung Branch. At the same time China signed an agreement under which she undertook not to build any main line near or parallel to the South Machurian Railway or any branch line prejudicial to its interests. This is a point of great importance, for China's violation of this agreement was one of the main causes of the present trouble.

With the elimination of Russia began the period of Japanese domination of Manchuria and the principal instrument was the South Manchuria Railway which is much more than merely a railway company, and which, apart from providing a main artery of communication in Manchuria, has engaged in many activities for the development of the country and is, in fact, a great colonization agency.

The harbour of Dalny, renamed Dairen, was extended and improved until now it is a great port equipped with every modern adjunct for efficient and rapid handling of cargo. An indication of this development is the fact that the tonnage cleared in 1920 was ten times the amount cleared in 1917.

Through the South Manchuria Railway facilities were provided for the development of markets and Japan was responsible for the opening up of sixteen cities in Manchuria which had hitherto been closed to foreign trade. Production has been increased, partly by assisting the Chinese in building new railways, of which more anon, and partly by improving agricultural methods by introducing modern equipment. Research and experiment have found new uses for the raw materials of the country, chief amongst which have been the many new uses of the soya bean. Japan has further contributed to the future prosperity of the country by building modern business and residential areas, by creating hospitals, schools and public works enterprises of all kinds, and, above all, by establishing in the railway zone those conditions of safety for life and property and security from illegal and arbitrary extortion so essential to the carrying on of trade and so conspicuous by their absence in China proper. The South Manchuria Railway is more to Manchuria than the Canadian Pacific is to Canada.

In the years that followed Japan steadily consolidated her position. Community of interests in face of the outer world, which did not view with much favour the domination of Manchuria by either Japan or Russia, drew the former enemies together, and in 1910 a Convention was signed between Japan and Russia for the maintenance of the *status quo* and for co-operation in the development of the Chinese Eastern and the South Manchuria Railways. In 1911 the Manchu Dynasty was over-thrown and China became a Republic. Thanks to the determination of Russia and Japan not to allow Civil War to extend to Manchuria, no disturbance followed, and up to the outbreak of the Great War no event of particular importance occurred.

During the Great War Japan had the field practically to herself in Manchuria, and, in January 1915, presented to China the famous Twenty-One Demands. These demands were in five groups and for the purpose of this paper it is necessary only to refer to the second group. This opened by stating that the Chinese Government "had always recognised the predominant position of Japan in South Manchuria and Eastern Inner Mongolia," and then made the following demands:—

1. The extension of the leases of Port Arthur, Dairen, the South Manchuria Railway and the Antung-Mukden Railway to ninety-nine years.

2. That Japanese subjects should have the right to lease and own land for purposes of business or farming in South Manchuria and Eastern Inner Mongolia.

3. That Japanese subjects should be free to travel or reside in South Manchuria and Eastern Inner Mongolia and to engage in business of any kind.

4. That Japanese subjects should be given mining rights in these countries.

5. That China should obtain the consent of Japan—
   (*a*) before giving permission to other nationals to build railways in South Manchuria or Eastern Inner Mongolia or to make loans for that purpose, and
   (*b*) to any proposal to raise a loan from a third Power on the security of the taxes of South Manchuria or Eastern Inner Mongolia.

6. That Japan should first be consulted if political, financial or military advisers were required in South Manchuria or Eastern Inner Mongolia.

7. That China should hand over control of the Kirin-Changchun Railway to Japan for ninety-nine years.

China was powerless. She temporised by putting up counter-proposals, and put off the issue for some weeks which gave foreign opinion a chance to make itself felt so that Japan's final demands were slightly more moderate.

On the 7th May, Japan presented an ultimatum. China bowed to the inevitable and signed a treaty by which Japan secured the following :—

1. The extension of the leases of Port Arthur and Dairen and of the South Manchuria and Antung-Mukden Railways to ninety-nine years.
2. The right of Japanese subjects to lease land, to reside and travel and to engage in business of any kind in South Manchuria.
3. The Chinese Government promised to open certain places in Eastern Inner Mongolia to foreign trade and to undertake a revision of the terms of the loan governing the Kirin-Changchun Railway.

Important provisions regarding the jurisdiction over Japanese subjects in Manchuria were also made.

The 1915 Treaty greatly strengthened Japan's position in Manchuria which was further consolidated by the collapse of Russia in 1917, which left Japan alone in the field. Between 1917 and 1920 five important loan agreements were concluded with the Chinese authorities by which Japanese capital was lent for the construction of various railways. They were :—

1. The Kirin-Changchun agreement of 1917 between the Chinese Government and the South Manchuria Railway Company.
2. The Kirin-Kainei loan agreement of 1918 between the Chinese Government and three leading Japanese banks.
3. The agreement of 1918 between the Chinese Government and the same three banks for the construction of the Jehol-Taonanfu, Changchun-Taonanfu, and Kirin-Heilungcheng Railways and for the extension of the Jehol-Taonanfu line to the sea.
4. The Chengchiatun-Taonanfu-Tungliao Railway agreement of 1919 between the Chinese Government and the South Manchuria Railway.
5. The agreement of 1918 between the Chinese Government and the three banks for a loan for the development of mining and forestry in the provinces of Heilungkiang and Kirin.

The way in which the Chinese carried out these agreements is of interest as showing the sort of thing the Japanese have had to put

up with in Manchuria. In the case of the mining and forestry loan, a sum of thirty million yen was advanced on the security of the mines and the forests and the revenue from them. The money was never used for the purposes for which it was borrowed so that the mines and forests were never developed and the security was worthless. When the other loan agreements with the banks were signed, advances were made of ten million yen in one case, and twenty million yen in another. This money too disappeared, used, for some purpose other than the legitimate one, and the work was never done. No progress was made with the agreement for the construction of the Changchun-Kirin-Kainei line, but it has since been built as far as Tunhwa under a later agreement.

In 1920 the reckless borrowing of the clique then in power in Peking had become so serious that the Powers decided to adopt a policy of refusing loans of any kind to any Chinese Government or party, and what was known as the Consortium was formed. This meant that a combination of British, American, French and Japanese banks would share equally in all Chinese Government guaranteed loans, and that the group would pool all their existing and future options.

This seriously affected Japanese rights and she strongly opposed the inclusion in the scheme of rights held by her in Manchuria and Mongolia. After prolonged negotiations, during which Japan claimed special spheres of influence in Manchuria and Mongolia, the British and American Governments gave a written guarantee that the Consortium would not engage in anything calculated to affect the security of Japan's economic life or national defence and that she could firmly rely upon the good faith of the Powers concerned to refuse to countenance operations inimical to such interests. With this Japan had to be content and withdrew her claim to special spheres of influence. The Consortium was signed and Japan's contribution to the pool was the concession for the Taonanfu-Jehol line and its eventual extension to the sea. All other railways in which Japan had an interest were definitely excluded.

The Consortium, incidentally, has accomplished nothing. The important question of spheres of influence came up at the Washington Conference in 1921 and a resolution was unanimously adopted that the Powers concerned undertook "not to support any agreements by

their respective nationals with each other designed to create spheres of influence or to provide for the enjoyment of mutually exclusive opportunities in designated parts of Chinese territory." This was embodied in the Nine-Power Treaty of which Japan was a signatory.

Another matter of great importance in connection with China's relations with the outside world considered at Washington, was what is known as the principle of "The Open Door." The exact definition of the term has always been a matter for discussion, but, broadly speaking, it is intended to ensure that all nations should have equal opportunities for trade in China. Japan has frequently been accused of violating this principle in Manchuria and it must be admitted that, when all allowances have been made for the accidential advantages which she enjoys by geographical position, the posesssion of the Liaotung Leased Territory and the South Manchuria Railway, it is difficult to avoid the conclusion that her policy in Manchuria has for some time been directed towards the creation of monopolistic spheres of influence, which, although technically covered by Treaty rights, are in spirit contrary to the principle of "The Open Door."

At the Washington Conference in 1921 China attempted to secure the cancellation of the 1915 Treaties but failed, although the publicity given to Manchurian affairs had the effect of somewhat checking Japan's aggressive policy.

This brings us to the fourth period of the history of Manchuria, in which Chang Tso Lin and his son Chang Hsueh Liang, commonly known as The Young Marshal, have, with the Japanese, been the principal actors.

Chang Tso Lin was a strong personality and a rather romantic figure. Starting life as a swineherd, he got tired of that, and became the leader of a gang of bandits, in which capacity he rendered valuable assistance to the Japanese during the Russo-Japanese War. He then became an officer in the Chinese Army and rapidly rose until, shortly after the establishment of the Republic, he became the virtual Dictator of Manchuria.

Owing to its position of isolation, Manchuria, although nominally a part of China, had always been administered as a separate dependency and this political isolation became even more pronounced. Chang Tso Lin was, to all intents and purposes, an independent ruler. When

it suited his convenience he was prepared to acknowledge the authority of whatever Central Government happened to be in power in China proper, but when it did not, he went his own way.

In 1922 he declared his independence of the Central Government. In the earlier part of his career he showed himself so accommodating in his dealings with the Japanese that he was suspected of being in their pay, but as he grew older he became more stubborn and developed an ambition to play a leading part in the affairs of China proper. This led him into military advantures inside the Wall, which not only proved a drain on the resources of Manchuria but got him into trouble with the Japanese, who have always been determined to keep civil war out of Manchuria. They looked with disfavour on the money he was wasting on his own military and political ambitions instead of devoting it to the development of the country.

However, he insisted on going his own way in face of Japanese advice and during the last few years of his life relations were very strained. In 1927 he succeeded in getting the reins into his hands at Peking, but his triumph was short lived. In the spring of 1928 the Nationalists made a drive northwards against him. Japan intervened and advised him to retire to Manchuria before he was finally beaten, and warned him that, if he did not do so and civil war was carried into Manchuria, his armies would be blocked at Sahnaikuan. He protested but had to give in. On his way back to Mukden a mysterious bomb explosion occurred, as the result of which Chang Tso Lin was so badly injured that he died almost immediately.

He was succeeded by his son Chang Hsueh Liang who has neither the ability nor the strength of character of his father. He has from the first had very pronounced Nationalist leanings, and this has brought him into direct opposition to the Japanese, who were afraid that if Manchuria became definitely Nationalist various questions concerning their rights and privileges might be made embarrassing. They were determined that the progress of the country should not be impeded by its becoming embroiled in the troubles of China proper. Things went from bad to worse and it was clear that he was doomed. He has been wise enough to keep out of Manchuria himself for some time now, and since the Japanese troops entered Chinchow the last vestige of his rule in Manchuria has vanished. Until the end of the Great War China submitted to the will of those stronger than herself, but, after the

Washington Conference, she began to re-assert herself in Manchuria. This took the form of studied disregard for the special privileges secured by treaty by foreigners generally and particularly the Japanese, by a systematic attack on the position of the Chinese Eastern Railway, and especially by a programme of railway construction regardless of its prejudicial effect upon Japanese interests. The underlying principles which governed this railway programme were to connect the three provincial capitals of Mukden, Kirin and Tsitishar by purely Chinese railways, so as to be independent of both the South Manchuria Railway and the Chinese Eastern Railway, and to compete with the South Manchuria Railway as the carrier of Manchurian produce to the sea.

These plans were designed, when completed, to provide two main systems. Firstly, a series of lines running from Taheiho on the Amur River in the north, through Tsitsihar, Anganki and Taonanfu, to Jehol, to the west of, and roughly parallel with, the South Manchuria Railway, traversing the rich agricultural belt. It was intended that this system should have its outlet at the Port of Hulutao, where harbour work has been in progress for some time. Secondly, another series of lines running roughly parallel with the Chinese Eastern Railway from Manchuli through Taonanfu, Changchun and Kirin to the coast of Korea at Seishin.

Though the second series of lines would be of great commercial benefit they are of very great strategic importance to Japan, as they would provide her with a third railway for her forward concentration in the event of war with Russia, the other two being the main South Manchuria Railway line from Dairen to Changchun and the Korean Railways to Antung and thence to Mukden and onwards. If you will refer to the map you will see that at present gaps exist between Manchuli and Solun, between Taonanfu and Changchun and between Tunhwasein and the Korean border. The Japanese impatience for the completion of the latter section has been an important factor in the present dispute.

Three of the above lines call for special notice. These are the Kirin-Mukden line. The Tahushan-Tungliao line and the Hulan-Hailanfu line with its proposed extension to Mergen and Taheiho. To the construction of the first two Japan objected on the ground that they violated the agreement by which China bound herself not to

build lines prejudicial to the interests of the South Manchuria Railway. Her objections were of no avail and these lines are open. Through traffic over Chinese lines to Kirin began last summer with a considerable flourish of trumpets.

The Hulan-Hailun line is an interesting example of the change which has taken place in the attitude of the Chinese towards Russia in Manchuria since the Bolshevik Revolution. A concession for the construction of this line was granted many years ago to the Chinese Eastern Railway but China, in complete disregard of her pledges, took over the construction herself.

On the outbreak of the present struggle in Manchuria the Japanese at once took possession of the Ssupinkai-Taonanfu-Anganchi line, which had been built with Japanese capital. By driving away the forces of the Chinese General Ma Chan Shan at the battle of the Nonni River, the only engagement in which Chinese troops made any attempt at resistance, they established themselves astride the Chinese Eastern Railway and isolated Harbin.

That, then, was the railway situation—the Chinese endeavouring to establish a network of lines which would compete with the South Manchuria Railway, and deliberately holding up construction on lines for which loans had been obtained from Japan and the completion of which China had, in various agreements, undertaken.

At the time of the outbreak of the present trouble the Japanese claimed that there were more than three hundred cases of infringement of Japanese rights awaiting settlement and there is no doubt that the Chinese have, over a period of years, been carrying out the usual policy of pin-pricks against foreign interests which has met with such success in China proper. It did not succeed however in Manchuria. Apart from the major problem of the railways, the principal matters of dispute between Japan and China were questions in connection with the right of residence, the right of lease, rights of commercial and industrial enterprises, illegal taxation, infringement of extra-territoriality, infringement of administrative rights in the South Manchuria Railway Zone, and the question of jurisdiction over Korean settlers who are Japanese subject. There are about a million of them in Manchuria, where they work as small farmers, and the Chinese have subjected them to a great deal of illegal taxation, extortion and persecution and have

consistently ignored their Japanese nationality. All these questions had been growing more and more acute, and it had become obvious that an explosion was bound to occur very shortly.

The League of Nations intervened in the dispute, but the Japanese Government has consistently claimed the right to negotiate direct with China, and has laid down a number of basic principles on which it is prepared to treat.

These are, briefly :—

(*i*) Mutual cessation of aggressive policy and conduct.

(*ii*) Respect for Chinese territorial integrity.

(*iii*) Complete suppression of all organised movements interfering with freedom of trade and the stirring up of international hatred.

(*iv*) Protection of legitimate activities of Japanese subjects.

(*v*) Respect for Japanese Treaty rights in Manchuria.

The Chinese view is that treaties which have been concluded by former Chinese Governments acting under duress are "unequal treatis" and should be revoked, and that they cannot negotiate until all Japanese troops have been withdrawn to the Railway Zone.

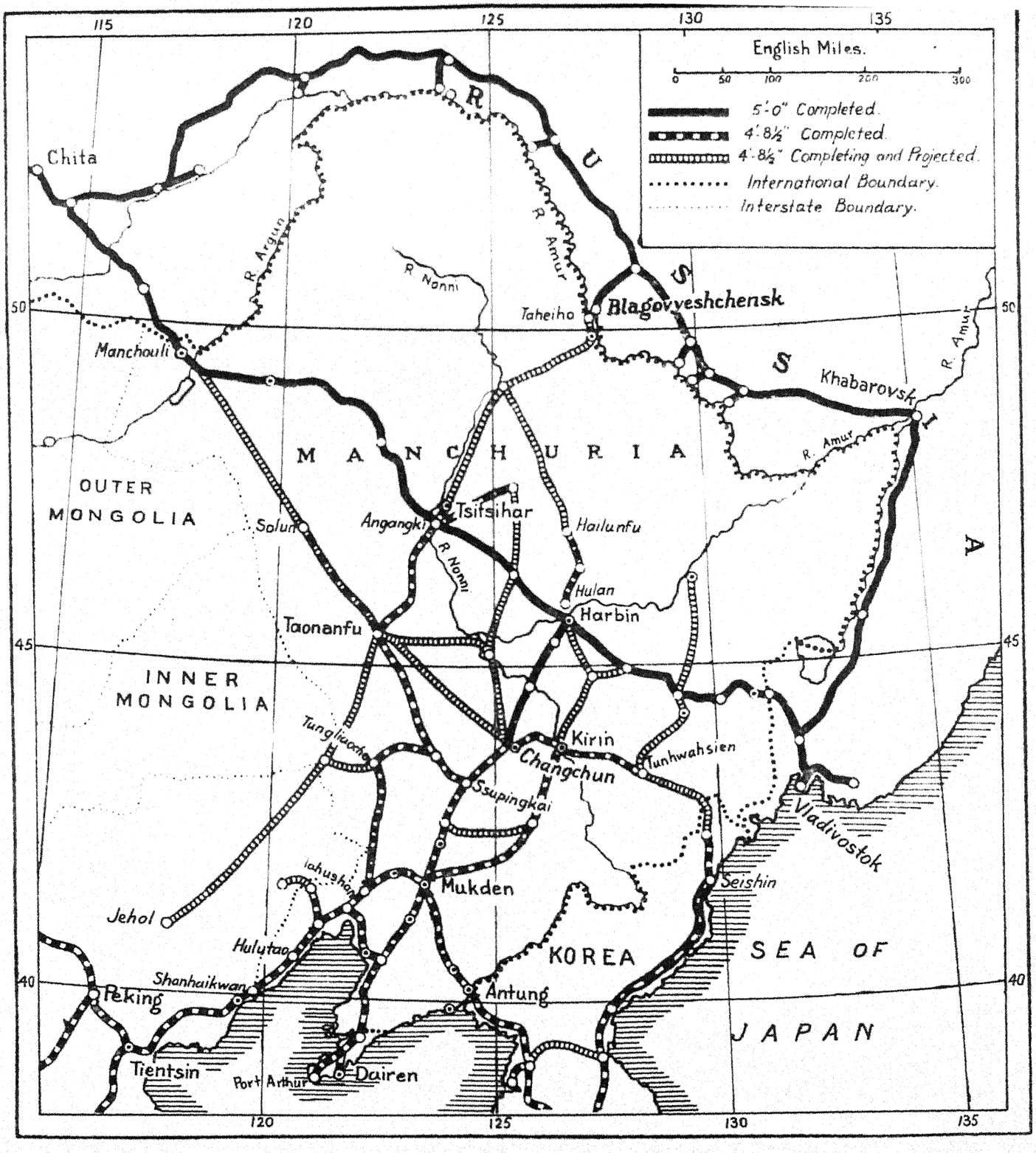
The attitude of Japan in Manchuria is easily understandable. It is obvious that Manchuria under the domination of another power would be a deadly menace to the very existence of Japan. She made enormous sacrifices in blood and treasure during the war with Russia, and justly claims that these sacrifices give her the right to a special position in the country. She has invested enormous sums of money there, something over 200 million pounds, and the retention of her position in Manchuria has become a matter of pure economic necessity. The increase in her population has become Japan's greatest problem. Emigration to most foreign countries is barred, and it has been found that the Japanese will not emigrate to undeveloped countries. In Manchuria, for instance, the Japanese cannot compete with the Chinese whose standard of living is much lower.

The only solution to the problem is further industrialisation and it is in this connection that Manchuria is of such vital importance to Japan. It supplies large quantities of raw materials for Japan's industries and the quantity will steadily increase as the country is developed. It has also the advantages of being close and reasonably safe

from attack. It is already a good market for the finished products of Japanese industry, and, as its prosperity increases, so must its commercial value to Japan increase. Last, but by no means least, Japan regards Manchuria as her first line of defence against the Red Armies and Bolshevism. Enough has been said to show that this is a case of the necessity which knows no law. It would be quite impossible for Japan to relinquish her hold on Manchuria and live.

There are, apart from those who are so purely pro-Chinese or pro-Japanese that they cannot see beyond the immediate selfish interests of either the one country or the other, two main schools of thought with regard to this Manchurian business. There are, on the one hand, those who regard the Japanese action as flagrant oppression of a weaker nation, as violation of the Covenant of the League of Nations, the Nine-Power Treaty signed at Washington, and the Kellogg Pact, and as a menace to the peace of the World. On the other hand are those who recognise that Japan's action was inevitably forced upon her by the inexorable pressure of economic and strategic necessity, who consider that China by her corruption and inefficiency has forfeited all rights to continue to misgovern Manchuria, and who believe that Japan, strongly entrenched in Manchuria, is a bulwark against Bolshevism and a guarantee of the peace of the World against the menace of Russia.

History will decide which view is the correct one.


English Miles.
0 50 100 200 300
5'-0" Completed.
4'-8½" Completed.
4'-8½" Completing and Projected.
International Boundary.
Interstate Boundary.
115 120 125 130 135
50
45
40
R U S S I A
Chita
R. Argun
R. Amur
R. Nonni
Taheiho
Blagovveshchensk
Manchouli
Khabarovsk
MANCHURIA
OUTER MONGOLIA
Solun
Angangki
Tsitsihar
Hailunfu
Hulan
Harbin
Taonanfu
INNER MONGOLIA
Tungliaoho
Kirin
Changchun
Tunhwahsien
Ssupingkai
Vladivostok
Iahushan
Mukden
Seishin
Jehol
Hulutao
KOREA
SEA OF JAPAN
Shanhaikwan
Peking
Antung
Tientsin
Port Arthur
Dairen



"TRAIN THE BRAIN!"
SOME SUGGESTIONS FOR THE ELEMENTARY TRAINING OF OBSERVERS.

By "Zarif."

"All soldiers should be trained in reconnoitring, observing, and reporting the results of their observations."

Infantry Training, Vol. I., Section 148 (3).

Major D. B. Mackenzie, in his article which appeared in the January issue of this journal on the Training of Battalion Intelligence Personnel, laid stress on the importance of accurate observation. Cavalry Training, Vol. I, Section 166, and Infantry Training, Vol. I, Section 149, lay down the standards required for scouts and observers, but little indication is given as to how these standards are to be reached; in fact, Infantry Training, Vol. I, Section 149 (2) states that "the methods of training to be adopted are left to the choice of the officers concerned."

It is not without some diffidence that the writer puts forward a few suggestions as to one method of instructing scouts and intelligence personnel; but, while remembering the truth of the saying "chacun a son gout", the success of the application of the following principles was so marked as to justify further experiment.

The average boy spends many hours, at his public school, much to his disgust, spoiling reams of clean paper in his studies of algebra, geometry, dynamics and the calculus; but it is extremely doubtful whether more than three per cent. of those youths, when grown up and taking their places in the world, ever experience the necessity to employ abstruse mathematics again. The real use of those subjects was to transform the small youthful brain whose outer surface was as smooth as an egg, into the capable, intricate mechanism of the fully-fledged and much be-wrinkled brain of the educated man; in other words it was the preliminary training which prepared the brain, making it capable of understanding the problems with which it would later be confronted.

The average private, trooper, sepoy or sowar has not been endowed with a very extensive education; and though perfectly capable of understanding amazing things if he is educated sufficiently, is not usually in a state that will absorb vast quantities

of 'high-faluting' instruction with any appreciable result. The brain must be educated up to a certain standard, when the knowledge can be imparted with comparative ease.

The soldier with a third class certificate of education is apt to regard map-reading as a mysterious faculty possessed by a limited number of clever people; but an accomplishment far above his ability, and therefore not worth considering. While he is in this frame of mind, it is practically impossible to teach him anything at all. Lack of interest kills progress and therefore the first essential is to capture the interest of the student.

An observer, if he is to be worth his absence from the firing line, must be capable of observing far more than the average man who has not been specially trained in observation work. There is a vast difference between 'observing' and mere 'looking,' and calling a man an observer or scout will not instil into him, as though by magic, the cunning of a practised eye.

A man of average intelligence who possesses good eyesight and can read a map, can see the obvious things which are happening on his front, and make some sort of a report even to giving full map-references; but that cannot be called real observation and is not of sufficient importance to warrant the withdrawal of a lance or a rifle from the fighting strength of a unit. That the majority of people in this world are virtually blind will readily be recognised if one reflects on the number of times one fails to get an accurate reply to such questions as "How many people were there?"; "What were they wearing?"; "What time was it?"; or "Was there anyone else there?" The almost universal answer is "I did not notice."

The elementary training of observers, then, can fall under the following progressive heads:—

(*i*) Understanding and recording what the eye has seen.

(*ii*) Remembering what has been observed.

(*iii*) Retaining information in the memory while doing something else.

(*iv*) Using the powers of observation while returning to make a report on the original mission.

(*v*) Map-memory.

Let us take each of these stages in turn and examine the means of training the men to reach them.

Understanding and recording what the eye has seen.

An excellent method of making a man use his eyes is to give him some common object which has a certain amount of detail about it, such as a fountain pen, a pocket knife, or any small object, and to tell him to write down every single thing he can about it. At first sight this exercise would appear to be too simple, but, if the man really concentrates on it, he will be astonished to find that at the end of even half-an-hour's examination he will still be discovering new things about the object which he had never noticed before.

Remembering what has been observed.

There is possibly no better exercise for this than the old game of " Kim." About a score of articles are placed on a tray and looked at by the man for three or four minutes. The tray is then removed and the man writes down as many of the articles as he can remember. If this exercise is given every day during some period of the day's work it is possible, at the end of a few weeks, for a class of Third Class Certificate men to write down correctly one hundred per cent. of thirty articles examined for one minute only. The art of remembering all that one has seen is acquired entirely by practice.

Retaining information in the memory while doing something else.

The previous exercise can be used again for this, allowing a space of time to intervene between the examination and the recording of the objects seen. As proficiency increases, the intervening time can be taken up with physical training, other exercises, or occupations which will clear the mind of the previous subject. After this interruption to their train of thought the men will write down the names of the things which they recollect.

Another method, which is also extremely useful, is to give the men verbal messages, increasing in length with practice, and make them carry them some distance before reporting them. It is rare that a scout or an observer has the time or opportunity to make notes of what he has observed, so the importance of being able to carry accurate information ' in his head ' cannot be over-estimated.

Using the powers of observation while returning to make a report on the original mission.

It may frequently happen that a scout, while coming back with a message, will be in a position to observe some incident of considerable importance. If he is ' mooning along ' in a brown study, with

his eyes shut, so to speak, he will miss it; but if his brain has been sufficiently well trained to allow him to 'forget' his actual message until he arrives at the place where he is to make his report, he will be free to observe what is going on around him without unexpected and startling events putting his original message 'right out of his mind.' Methods of devising interruptions in the carrying of verbal messages to instil this habit, will readily occur to the officers concerned.

Map-memory.

This is a most important subject for officer, non-commissioned officer and man alike. The value of a good map-memory will be recognised immediately, and the observer who can return to his headquarters and draw a good rough sketch of the area which he has been observing is worth his weight in gold.

There is another aspect which should be considered. The nuisance of having to extract a bulky map from the pocket and hold it flapping in the wind, while one's horse waltzes under the thorny branches of a *kikar* tree, is too well-known to need description. Constant practice is required in visualising the country when looking at the map and in drawing the map again in one's mind's eye when crossing country. Both these accomplishments will eventually prove to be of the greatest value to anyone who spends a little time in acquiring them.

A good method of acquiring a map-memory is as follows:—

(*i*) Enlarge, quite roughly, a square of a map. Then, putting away both the map and the enlargement, draw a rough sketch of the enlargement from memory.

(*ii*) Have a piece of country made on a sand-model; make a rough sketch of the country as displayed on the sand-model.

(*iii*) Draw a rough sketch of any imaginary piece of country; then model it from memory on the sand-model.

(*iv*) Examine a piece of country on a map; look at it very carefully and then draw a rough sketch of it from memory. Leave both the map and the rough sketch at home and ride out to the piece of country selected. Look at the country, and make a note of anything which you observe there which you had not observed on the map. Then return to your map and sketch and see whether you had merely forgotten it, or whether the map was faulty or out of date.

These little exercises to acquire a good map-memory need not be made a burden, but can be used as a means of adding a little interest to an ordinary hack-ride or an afternoon's walk. The benefits which will accrue from them are enormous.

Estimation of numbers and the identification of units can be practised by liaising with other squadron and company commanders, and by sending a few observers out with the skeleton enemy on squadron and company schemes. They will then get a considerable amount of practice otherwise difficult to obtain.

These suggestions are all very elementary, but it must be remembered that the acquisition of a good memory comes only from constant practice. It will soon be found that, after the initial effort of memorising, the action becomes a habit, and what originally needed intense thought and mental concentration rapidly disappears into the undiscovered intricacies of that mysterious faculty, Second Nature.

Once the habit of memorising and observing intelligently has been acquired, the actual taking of verbal messages, or reporting on a situation become as easy as falling off the proverbial log; but however comprehensive the education may have been, however intense may be the thought, however clever the man, the door opening on to the royal road to successful observation and message-carrying can only be unlocked by one key—the preliminary training of the brain.

THE PERSIAN CAMPAIGN OF 1856-57.

By Lieutenant-Colonel C. C. R. Murphy.

Briefly, the cause of the rupture between Great Britain and Persia in the middle of the last century may be summed up as a dispute over the city of Herat, which the Persians had long since regarded as the eastern gateway into their kingdom, and which they were now striving to regain.

The Peace of Paris, bringing to a close the Crimean War, had only just been signed when events in Persia took on unfavourable turn, and it soon became known that the Shah had despatched an army from Meshed to seize and occupy Herat. Great Britain, resenting this overt act of interference with Afghanistan, and determining to resist the advance of Persian troops towards the Indian frontier, immediately declared war against Persia. The short yet brilliant campaign that followed, tightly wedged in as it was between such stupendous events as the Crimean War and the Indian Mutiny, was so completely over-shadowed by them that, strange to say, no complete account of it has ever reached the public, showing how 'the iniquity of oblivion blindly scattereth her poppy.'

War was declared on the 1st November, 1856; but the eventually was not wholly unexpected, and during the preceding August the Governor-General of India had received instructions from home 'to prepare and hold in readiness for foreign service overseas an expditionary field force.' These instructions were put into execution at once, but the troops did not leave India until nearly the middle of November.

The expeditionary force comprised a strength of 5,670 fighting men, of whom 2,270 were Europeans, with 3,750 followers, 1,150 horses and 430 bullocks; and was embarked at four points, namely Bombay Vingorla, Porebunder, and Karachi. The fleet consisted of eight war-steamers of the Indian Navy,* seven hired steamers, and thirty sailing ships; in all, forty-five sail, under the command of Rear-Admiral Sir Henry Leeke. The first objective of the expedition was naturally Bushire, the principal port in the Persan Gulf. The force, under the

* Now bearing the somewhat confusing title of the Royal Indian Marine.

command of Major-General Foster Stalker, was organised as follows :—

1st Brigade. Brigadier J. Stopford, C.B.

H. M.'s 64th Foot.
20th Native Infantry.

2nd Brigade.

2nd European Light Infantry.
4th Native Infantry.
2nd Baluch Battalion.

Artillery.

3rd Troop, Horse Brigade.
Two Companies 1st Battalion, European Foot Artillery.
Reserve Artillery, European Foot Artillery.

Cavalry.

Headquarters and two Squadrons, 3rd Light Cavalry.
Two Troops, Poona Irregular Horse.

Engineers.

Headquarters and two Companies Sappers and Miners.

Towards the close of November a detachment of the fleet, namely the steam frigate *Feroze* towing two merchant ships, and the corvette *Falkland*, hove in sight of Bushire, and a few days later the Island of Kharg* was occupied and turned into a military depot. On December 6th, the fleet moved down to Halileh Bay, which Commodore Ethersey had pronounced the best suited for the debarkation of the troops ; and on the following day this was effected in admirable order. The landing though unopposed, was not unobserved by the enemy, small parties of whom were driven from their lurking places in the date groves by the fire of the gunboats. Shortly afternoon the force advanced a distance of two miles and, having taken up an extended front, bivouacked there until the 9th.

The Admiral now decided to go ashore the next day to discuss with General Stalker the arrangements for attack, and in connection with this visit history relates a remarkable story, which is typically Persian. On the following morning, horses, grooms, and an interpreter were accordingly sent down to the beach to meet the Admiral and conduct him to the camp. The party, however, had not gone very

* Formerly spelt Karrak, or Karag, 36 miles from Bushire.

far when the Admiral's horse deposited his august burden on the ground. At this the interpreter became greatly alarmed, and fearing that he would be held responsible for this blow to British prestige, fell to thinking how best to conceal from the Persian people the real truth of the affair, namely the Admiral's poor horsemanship. It would never do, he thought to himself, to let that be known. In this quandary, however, the nimble-witted interpreter remembered that amongst Christians the practice of drinking wine was not only lawful, but even popular. So the next day he called at the General's tent and announced with an air of profound satisfaction that he had made it all right about the accident. He had told the people that the Admiral was drunk.

On December 9th the troops were set in motion northwards, the ships of war, led by the Admiral, moving up the coast and giving the closest possible support. After some smart skirmishing, the enemy retreated into the village of Reshire* nearly six miles from Bushire—where amid the ruins of old houses, garden walls, and steep ravines, they occupied a formidable position. Wall after wall was systematically surmounted, many of the enemy fleeing in the meanwhile. A body of Tangistanis,† estimated at about eight hundred, who were holding the old Dutch fort, continued to make the most strenuous resistance, but were finally driven out with heavy loss, Brigadier Stopford being killed on top of the parapet. On the fort being carried at the point of the bayonet, some of the garrison fled down the cliffs, where they met their death, and here Colonel Malet was killed by a Tangistani to whom he had given quarter. At the close of this spirited attack in which our casualties did not exceed fifty, the wounded were collected and sent off to the ships, the troops (who were without tents) passing a cold night on the ground won. Colonel Nicholas Wilson, K. H., 64th Foot, now succeeded to the command of the 1st Brigade.

General Stalker having decided to attack Bushire on the following morning, the fleet moved up into the roadstead. At daybreak the Persian army was seen drawn up in battle array across the *mashileh*‡

* The battle honours "Reshire" and "Koosh-ab" are here spelt as they appear on the colours and appointments of regiments. In the P. C. G. N. these place names are shown as Rishahr and Khush-ab.

† From the neighbourhood of Bushire; they are partly descended from Arab pirates.

‡ The low-lying sandy tract which joins the Bushire peninsula to the mainland. During high tides it is liable to inundation.

its centre supported by a high fortified tower and redoubt approximately a mile and a half from the town walls, and commanding some of the wells from which the better class townsfolk still get their water-supply. A flag of truce was now sent off to the ships asking for a delay of twenty-four hours, but this was instantly refused, and at eight o'clock in the morning the signal was hosited for the ships to engage. Shot and shell were aimed at the redoubt, but with little effect owing to the range. The enemy however, evidently deeming their position out on the plain a little too exposed, shortly withdrew into Bushire ; but during this retirement the ships also moved upon the town, and such was the ardour they displayed in getting close into the works that 'every ship was laid aground at the turn of the tide.' Thus they continued for four hours to bombard the defences, which were active in replying the whole time. Few of the enemy guns possessed sufficient range to reach the ships, but the perseverance of the Persian gunners in firing their heavier pieces was certainly admirable.

The guns of the fleet were next turned on to the fortifications to prepare a breach for our fast-approaching troops ; but when the latter came within five hundred yards of the town the enemy suddenly hauled down their flagstaff in token of submission ; the firing then died away and the attack was over. The bold handling of the ships, the brave appearance of the troops, and the lesson the enemy had learnt the previous day at Reshire, were responsible for the want of spirit in so tamely surrendering this fortified town, in which the British found sixty-five guns, and great quantities of ammunition and warlike stores.

After surrender, some hesitation was shown on the part of the Governor and the garrison to come out of the town ; an assuring note, coupled with a threat of an assault in half an hour, was however sent in by a freed captive and at the expiration of the time, the Governor with his suite was seen issuing from the gate. He was then conducted to headquarters where he was formally received by Major-General Stalker and Rear-Admiral Leeke. Shortly afterwards, the Sarhang (Colonel) in command of the troops surrendered his sword, the entire garrison at the same time laying down their arms. The British flag was then hoisted on the Residency flagstaff, and at sundown the troops moved into the town. The next few days were spent in consolidating the position.

A month later, a second division (composed as under) was organised in India for service in Persia, and Lieutenant-General Sir James Outram appointed to command the whole force. Brigadier-General John Jacob, C.B., commanded the cavalry of both divisions.

2nd Division.—Brigadier-General Henry Havelock. C.B.

1st Brigade.—Brigadier W. Hamilton, 78th Highlanders.
78th Highlanders.
26th Native Infantry.

2nd Brigade.—Brigadier J. Hale.
23rd Native Infantry.
The Light Battalion.*

Artillery.—Brigadier G. Hutt, C.B.
1 Troop R. H. A.
2 Field Batteries.

Cavalry.—Colonel C. Steuart, 14th Light Dragoons.
14th (The King's Light) Dragoons.
1,000 Scinde Horse.

It will be observed that this list contains two names, *viz.*, Outram (the Bayard of India) and Havelock, which before the year was out had become household words in the English language.

When Outram reached Bushire at the end of January, 1857, he learnt that the main concentrations of the enemy were at Mohammerah and Borazjun. At the latter, a village on the Bushire—Shiraz road, the Persian Commander-in-Chief, Shuja'-al-Mulk, had formed an entrenched camp which he was reported to be holding with a force of eight or nine thousand men and seventeen guns. From the information received, Outram drew the conclusion that this force had been organised to recapture Bushire and not merely to bar the road to Shiraz, and that it was necessary to strike a blow in that direction before extending his operations elsewhere.

A few days later, the first brigade of the new division arrived from Bombay, and was disembarked immediately; and on February 3rd, with great swiftness of action, a column of 4,635 men of all arms, and eighteen guns, marched from Bushire without tents or extra clothing of any kind, each man carrying his greatcoat, blanket, and two days' cooked rations, and the commissariat carrying three days'

* Composed of ten light companies of various N. I. regiments.

provisions. A force of 378 Europeans, 1,466 native infantry, a company of European artillery and 14 guns, under Lieutenant-Colonel Shepheard, and reinforced by a party of seamen from all the ships, was left behind to guard the camp.

After a march of forty-six miles in forty-one hours, during which the troops encountered unusually heavy rain and cold nights, they reached the enemy's position in the early morning of the 5th, only to find it abandoned, and to descry, 'to the disgust of all,' the Persian army in full retreat before them. On hearing of the rapid approach of the British they had evacuated their position so hurriedly that they had left practically everything behind except their guns. Our cavalry tried to intercept parties of the Ilkhani's horse,* but after some skirmishing the latter made off in the direction of Shiraz. In this little affray Brigadier Honner had a narrow escape, a bullet passing through his clothing and lodging in the tree of his saddle. The last stage of this march, be it noted, was through hills where a handful of resolute men might, at every turn of the track, hold up an army.

The British force was soon in possession of the entrenched camp near Borazjun; great quantities of stores fell into our hands, the enemy having gone off 'in a most hurried and disorderly manner.' The earthwork round the camp was useless whereas the village itself might easily have been made too formidable for the small British force to have captured.

The next two days were spent in the enemy's position, destroying stores and searching for guns, without experiencing any annoyance from them. On the evening of February 7th, the return march to Bushire was commenced, the column taking away as much of the captured stores as possible, and the Governor of Borazjun as a prisoner. After getting clear of the camp the troops were halted to witness the explosion of forty thousand pounds of the enemy's gunpowder, when the march was quietly resumed. Shortly before midnight, however, a sharp rattle of musketry and the firing of two guns showed that the rearguard (in the capable hands of Brigadier Honner) was being attacked in force. The column was promptly halted, and within half an hour not only the rearguard but the whole force was engaged. Persian horsemen galloped about on all sides, blowing trumpets and bugles and yelling like fiends; but finding they could occasion no

* The chief of a nomad tribe.

disorder they withdrew, and for the remainder of the night the troops had to contend with nothing more serious than sniping. The British, having taken up a position in the shape of an oblong, lay down and without noise or lights awaited the dawn. While these dispositions were being completed, Sir James Outram met with a severe accident, his horse falling heavily and rolling over him. The enemy now opened fire with his heavy guns; one shot plunging into the 64th Regiment knocked down six men, killing one of the number; another, first taking off a foot from Lieutenant Greentree, also wounded Captain Mockler—all of the same regiment. Several followers and baggage animals were killed and wounded.

At last when dawn broke, and a sharp wind had cleared away the morning mists, the Persian army was seen in position and fairly offering us battle; they were drawn up in line, with their right resting on the walled village and date groves of Koosh-ab and their left on a hamlet with a round fortalice tower.

Our artillery and cavalry at once moved rapidly to the attack, supported by two lines of infantry, a third protecting the baggage. The firing of the artillery was excellent, and the loss and disorder which it occasioned made openings for our cavalry who twice charged with great dash and conspicuous success. A standard of the Qashqai Regiment was captured by the Poona Horse; and the 3rd Light Cavalry charged a square and 'killed nearly the whole regiment.' Indeed, upon the artillery and cavalry fell the brunt of the action, since the enemy—who soon wavered and broke—moved away too rapidly for the infantry to overtake them. By ten o'clock the defeat of the Persians was complete, and at least seven hundred of their number lay dead upon the field. The total of their wounded could not of course be ascertained, but must have been very large. The remainder fled in disorder, generally throwing away their arms which strewed the field in vast numbers. Nothing but the paucity of our cavalry prevented their total destruction and the capture of all their guns. The British losses in killed and wounded amounted to six officers and seventy-eight men.

The troops bivouacked for the day close to the battlefield, and at night accomplished a march of twenty miles over country rendered almost impassable by heavy rain. After a rest of six hours the infantry continued their march to Bushire which was reached late at night on

the 9th; thus performing 'another most arduous march of forty-four miles under incessant rain, besides fighting and defeating the enemy during its progress, and all within the short period of fifty hours.'* The cavalry and artillery reached camp the following day. Thus ended the first phase of the campaign.

On their return from this exhausting expedition into the interior, the troops were given a few days' rest before undertaking the construction of the Bushire defences. With a troublesome *shimal* blowing the whole time, five strong redoubts were built all being armed with position guns, and one with two 68-pounders. In the meantime the arrival of the remainder of the 2nd Division was anxiously awaited to enable Sir James Outram to deal with the enemy concentration at Mohammerah.

At last, on March 6th, all the infantry of the missing brigade, with one horse artillery troop and a troop of the 3rd Light Cavalry reached Bushire; and three days latter a squadron of the Scinde Horse also arrived. Owing to these delays, Outram was unable to leave Bushire until March 18th, but in the meanwhile he had despatched the transports to the Shatt-al-'Arab.

The Persian army at Mohammerah, occupying a prepared position of great natural strength, consisted of about 13,000 men of all arms, with 30 guns, under the command of the Shahzadeh Khanler Mirza; so that here, as at the battle of the Baltic, 'the prince of all the land led them on.' The British force totalled 4,887 men and 12 guns, with four armed steamers and two sloops of war.

On March 24th, the steamers, with transports in tow, moved up the river towards Mohammerah. At this season of the year, the Shatt-al-'Arab is almost at its highest, but the navigation of the river is not easy, and some of the vessels running on to mud banks did not reach the rendezvous till after dark. While this concentration was in progress, the melancholy news was received from Bushire that Major-General Stalker and Commodore Ethersey had committed suicide within a few days of one another.

The first requirement at the moment was to find positions for the mortars, and with this end in view a party of engineer officers set

* Outram.

out that night in a *bellum** to reconnoitre a low island† situated on the Arabian side of the river, just below the mouth of the Karun. Upon examination however, the island was found to be composed of soft mud, and as no other sites were available a raft was hastily constructed on which were placed two 8-inch and two 5½-inch mortars, under Captain John Worgan, Bombay Artillery. On the following night the raft was towed into position behind the island, about a thousand yards from the Persian batteries on each side of the Karun mouth. Here the raft was securely moored. The range proved just too great for the 5½-inch mortars.

At daybreak on March 26th, the 8-inch mortars began lobbing shells from their floating platform into the sixteen-gun battery at the north point of the river, causing the utmost damage and confusion. This unexpected factor, coupled with the havoc wrought by our 68-pounders, quickly established a fighting superiority over the Persians, and after about three hours of bombardment, the fire from their unenterprising batteries had been sufficiently reduced to allow the small steamers, and one large one towing a transport, to run the gauntlet and land troops on the Persian bank above Mohammerah. The excessive boldness of this manœuvre paralysed the Persians, who now turned their faces towards their line of retreat. Disembarkation was no easy task, but once clear of the ships the troops advanced rapidly on the entrenched camp of the enemy who, without waiting to receive them, fled in panic, leaving behind them all their guns,‡ every tent standing, and three hundred dead upon the field. The British casualties were less than fifty, all told.

An outstanding feature of this remarkable action was the cool daring of Captain Worgan's artillerymen, who remained on their raft during several hours of darkness, in a rapid river, with no means of retreat, and almost certain destruction staring them in the face.

Driven from their stronghold in Mohammerah, the enemy fled to Ahwaz, an old town over a hundred miles up the river Karun, whither Sir James Outram despatched 300 men, under Captain Hunt, to carry

* The ordinary passenger boat of the Shatt-al-'Arab ; it is about twenty feet long, with no keel, and is usually poled by two men.

† This bank, now called Umm-al-Khasasif, is one of the unstable islands of the Shatt-al-'Arab, and subtends the Zain tracts where, on the 17th November 1914, was fought the battle which delivered Basrah into British hands.

‡ Some had been thrown into the river.

out a reconnaissance in force. On April 1st, these troops—half of whom belonged to the 64th Foot and the other half to the 78th Highlanders—having been landed, set off towards Ahwaz, their advance being supported by the fire of the gunboats. Within a couple of hours this tiny British force was in possession of the town, and the Persian army consisting of 6,000 infantry, some guns, and swarms of Bakhtiari horsemen, were in full retreat upon Dizful.

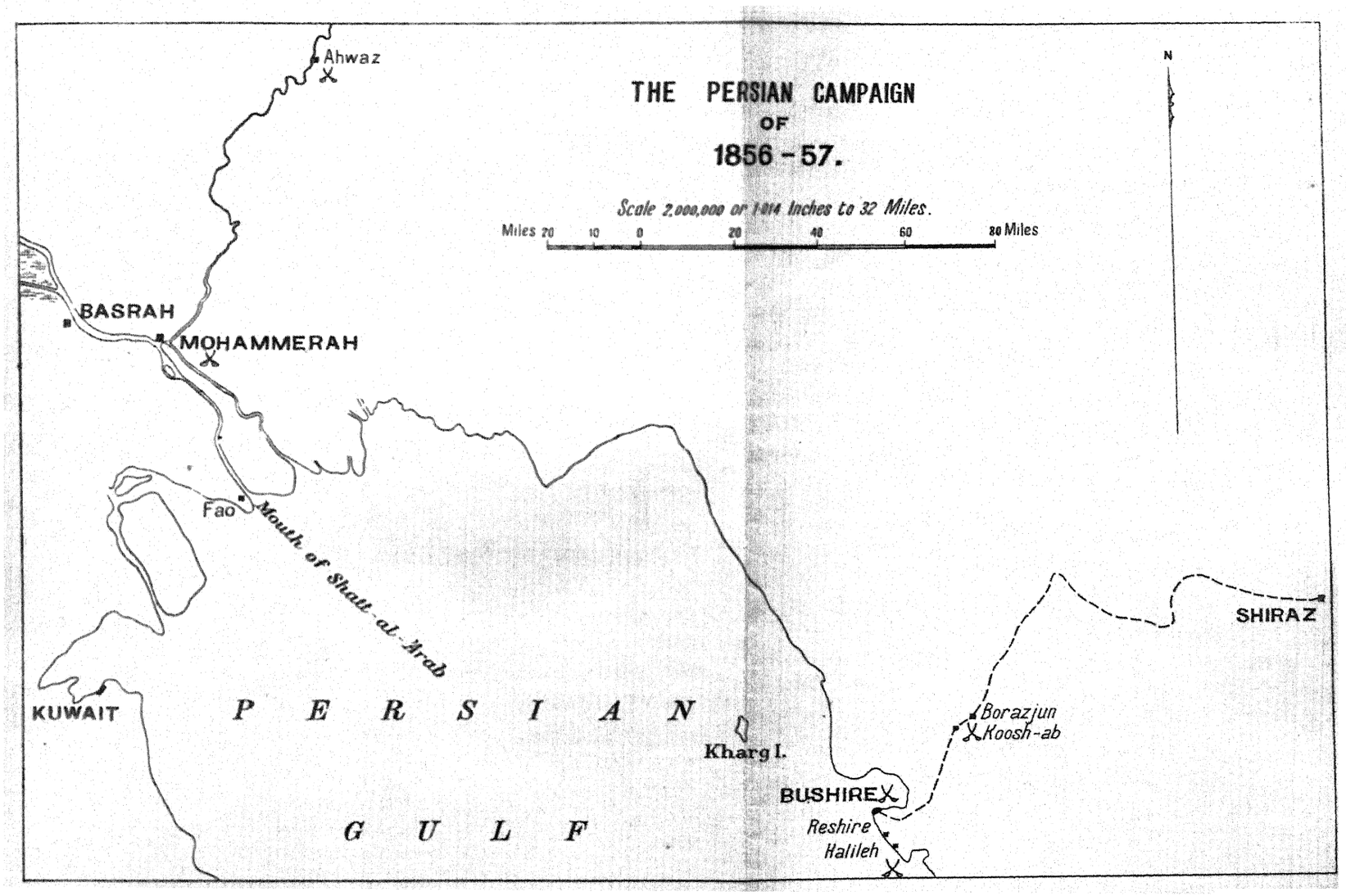
Outram, writing of the Ahwaz affair, says: 'A more daring feat is not on record perhaps, than that of a party of three hundred infantry backed by three small river boats, following up an army of some 8,000 men, braving it by opening fire, and then occupying for three days the position they had compelled the enemy to vacate.'

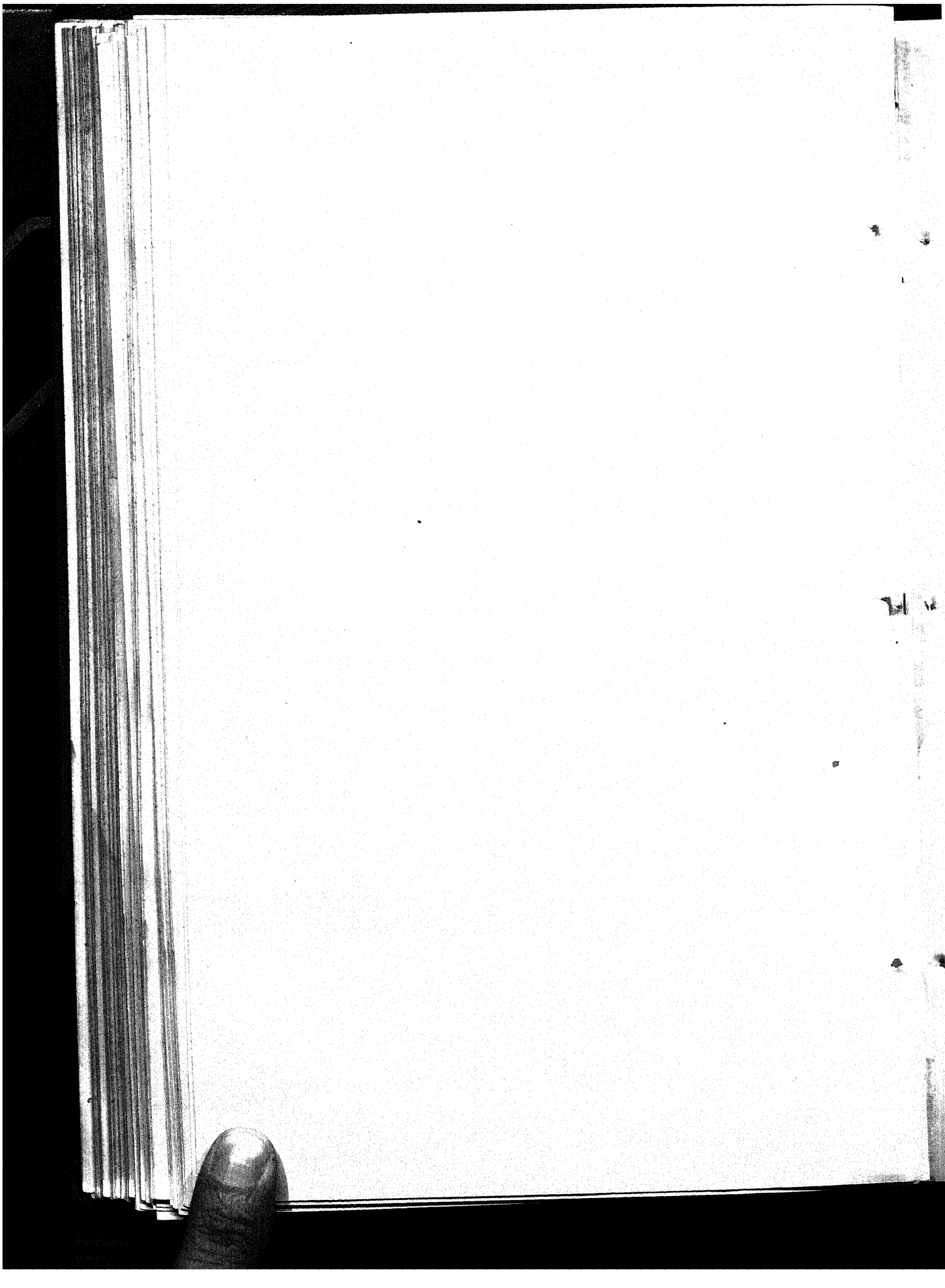
This was the final episode of the war, and a few days later, Outram received news in Mohammerah that a treaty of peace, between Great Britain and Persia had been signed in Paris. With the exception of a small force retained at Bushire, under General John Jacob, for the three months assigned for the ratifications, the British troops returned to India, where their presence was greatly needed owing to the outbreak of the Indian Mutiny. As for the results achieved by the war, these were negligible; for all that Great Britain got out of it was a written apology.

The medal granted for the Persian campaign was the first India General Service medal, which early in 1854 Queen Victoria had sanctioned for the Burmese war of 1852-53, the ribbon of which is crimson with two stripes of dark blue. Only one clasp was issued, namely 'Persia', but four battle honours were granted as follows: 'Reshire', 'Bushire', 'Koosh-ab', and 'Persia'.

After reading the foregoing account it is interesting to note how history repeats itself. In the attack on Reshire for example, mention has been made of the Tangistanis. It may not be generally known that Dilwar, the stronghold of these tribesmen, was bombarded by the British in 1913, and again in 1915; and that when Bushire was seized and occupied during the great war, the causative act of provocation was an attack made on the British detachment by these same Tangistanis. Ahwaz too, which had witnessed the brilliant exploit of 1857, was the scene of considerable fighting between Great Britain and her enemies nearly sixty years later.

The student of military history will recognise in every action in this campaign an example of the bold, determined hand demonstrating the impotence of inefficiency. The musketry of the Persians was ludicrous; indeed it might almost be said that they discharged their firearms at random without heed to aim or range. They seemed altogether incapable of producing any effect with their fire. As soldiers they were caricatures; but let it here suffice to quote the famous saying which it is on record that one of their commanders of those days actually uttered: 'O Allah, if there were no dying in the case, how the Persians would fight!'


THE PERSIAN CAMPAIGN
OF
1856 - 57.
Scale 2,000,000 or 1.014 Inches to 32 Miles.
Miles 20 10 0 20 40 60 80 Miles
N
Ahwaz
BASRAH
MOHAMMERAH
Fao
Mouth of Shatt-al-Arab
KUWAIT
P E R S I A N
G U L F
Kharg I.
BUSHIRE
Reshire
Halileh
Borazjun
Koosh-ab
SHIRAZ



THE NEW INFANTRY TRAINING, VOLUME II.

By Captain M. C. T. Gompertz, I.A.S.C.

Although it may seem a little unusual to praise an official Training Manual, it is difficult to avoid expressing admiration for the recently-issued Infantry Training, Volume II, 1931. It is a model of simplicity and lucidity of expression. This, of course, does not gainsay the fact that the inherent difficulty of command in war is the application of principles to existing circumstances and to ground. Even so, practice is assisted when theory is put simply, logically, and in an easily understood form.

The simplicity of the 1931 edition by no means implies labour-saving devices or rules of thumb. The reverse is, in fact, the case. Thus, the 1926 edition gave, as a guide, frontages to be adopted, *e.g.*, " a company can defend a front of 500 or 600 yards " (Section 22·5); these are now omitted. Similarly, such statements as " when the pursuit is not close, a rear guard's dispositions on the line of march resemble those of an advanced guard reversed " (Section 30·6), savour of a " crammer " and find no place in the present book.

A useful method of studying a new edition of a Manual is to compare it with its predecessor, marking in red the new material in the new edition, and striking out in blue in the old edition whatever re-appears in the new. This gives the developments that have taken place, *viz.*, on the one hand the inclusions, on the other the omissions.

Applying this method, the new I. T., Volume II, has four clear characteristics :—

(*a*) Much material taken from other manuals.

(*b*) Better arrangement.

(*c*) More direct or precise English.

(*d*) New material.

The new edition contains many extracts from F. S. R., Volume II (Operations) 1929, and from A. T., Volume II (War) 1928. Thus, on its first full page (p. 2) extracts are taken from Sections 8, 21 and 30 of F. S. R., Volume II.

Better arrangement is shown by the fact that these extracts are so well worked in to the text as to appear to be a piece of consecutive writing: by the use of sub-headings, as for example, when dealing with Outposts; and by the re-arrangement of matter from one part of the book to another.

The English has been made more direct by a sparing use of such phrases as "It must be remembered that," and more precise by a general substitution of "will" for "must" or "should."

It is the purpose of this article to indicate the more important new material, some of which may have appeared in Training Memoranda, etc., but which now makes its first appearance in Infantry Training. Particularly noticeable are the Sections dealing with the employment of the Machine Gun Company. These Sections are, of course, new matter since the introduction of the Machine Gun Company took place after the previous edition was published. All of them require close study, but will not be alluded to again in this article. These Sections are 14, 15, 22 and 23, whilst Section 4 (10) is largely composed of new material.

In order to save repetition, the 1926 edition of Infantry Training, Volume II, is referred to as O. E. (old edition).

Chapter I.

Gaining Contact.—Section 2 (3). The old definition of gaining contact in so far as it concerns infantry as "the time when it first comes under the aimed small arms fire of the enemy" has now been omitted. The necessity for acting boldly and quickly at this stage, in spite of vague information, is of great importance. More respect is paid to the enemy detachments, and the fact that they may have an offensive rôle is mentioned.

Consolidation.—Section 2 (5). Note that this is not nearly so passive as before.

Defence.—Section 2 (7). The O. E. had two guiding principles. Another which in the O. E. appeared later in the book has been added and is put first, *viz.*—"Fire must be organized to stop the enemy".

Frontages.—Section 3 (5 and 6). Mostly new. The pros and cons of wide and narrow frontages are very clearly put. Note that reduced fronts do not necessarily help units in the attack.

Infantry weapons.—Section 4 is mostly new as regards grenades, machine guns, and A. T. weapons.

Fire.—Section 5 (7). Note the requirements for ensuring continuous support of the attack.

Use of ground.—Section 6. The correct relation of maps and study of the ground is given.

The vital importance of ground in selecting positions for covering fire, when infantry have to cross open ground exposed to fire, is emphasized.

Note section 6 (3) (iv) (vi) (vii).

Inter-communication.—Section 7 (7). Note position of Machine Gun Company, Platoon and Section Commanders.

Cavalry.—The last paragraph of Section 8 (2) draws attention to the value of infantry commanders keeping in touch with Headquarters of cavalry units, operating between them and the enemy.

Artillery.—Note the explanation of the terms "under the command of" "in support of" Section 8 (4) : the use of light artillery in defence Section 8 (5) (*i*) : the pros and cons of concentrations and barrages, Section 8 (5) (*ii*) : the use of Field artillery to harass, blind with smoke, destroy wire, and in close support, Section 8 (5) (*ii*) : the duties of F. O. O.'s Section 8 (8).

Tanks.—The co-operation of Tanks with infantry is clearly put in Section 8 (15 to 18). Note the differences when one or the other is the main assaulting arm.

Aircraft.—Aeroplanes of A. C. Squadrons are for reconnaissance, and should not be used offensively except in grave emergency. They can carry a few light bombs, but do not normally do so. Section 8 (24).

Note also :—the two last paragraphs of Section 8 (24) the ground to air signals to be laid down in orders, Section 8 (26) (*i*) : troops are to be ready to communicate with any aeroplane that signals to them. Section 8 (26) (*i*).

Chapter II—Attack.

This Chapter is perhaps the most interesting in the book, since it has been re-written more than any other.

Gaining Contact.—Section 9. The need for commanders to be well forward and to be "thinking ahead" is emphasized. The

Officer Commanding the mounted troops will keep Vanguard and Advanced Guard Commanders constantly informed of his progress. Once the mounted troops are definitely held up and relieved by the infantry, their additional duty is to locate the enemy's flanks, whilst the task of gaining information devolves more and more on the infantry. Section 9.(2).

Forward rifle companies will be directed against definite objectives, establishing contact on each objective. Correct infantry action at this stage greatly simplifies the organized attack, which may become necessary later. Section 9 (3 and 6).

Artillery support can usually best be given by observed fire, when the situation is indefinite, and knowledge of the enemy is scanty. When stiffening resistance is met, it may be necessary to ensure adequate fire superiority by concentrating against different objectives in turn. Make certain of one place first: then deal with the next: and so on. Section 9 (4). Section 30 (15).

General Attack Considerations.—Section 10. Note that the preparation of an adequate fire plan takes time: that each component part of the force should have its own task to carry out, and its action should not depend entirely on the success of other parts of the force: that the starting line (at least 200 yards from the opening artillery fire) should be easily recognizable on the ground, Section 10 (4); and the warning at the end of Section 10 (5) about capturing *and holding.*

Orders for the Attack.—Section 11 (1 to 4; 23). The O. E. dealt summarily with the orders from the superior commander by the delightfully trite observation "Having received his orders, the Battalion Commander will proceed to put them into effect" O. E. Section 13 (3). In place of this, we have in Section 11 (4) a well tabulated list of important points, prefaced by the necessity of clearly understanding the Commander's intention. Note the inclusion of three points on machine guns, the use of smoke, and the points of junction with flank units on successive objectives. Attacking battalions retain control of their machine guns, though Brigade tasks may be allotted in the opening stages.

Verbal orders, both in the case of Battalion and of Company Commanders, should be given within view of the ground of action. The Commander will check over the essential points, after those

present have made notes. Sections 11 (23) and 12 (5). This also applies to Defence Section 21 (13). The orders of the Battalion Commander will be confirmed in writing.

Preliminary Action.—This is very clearly set out in Section 11 (5 to 8). Note the contents of a short warning order : the use of mounted officers and the intelligence section on reconnaissances : the minimum of officers with the Battalion Commander.

As regards the plan, there are again three new points about machine guns, whilst the stages of the attack and the crossing of the starting line need careful consideration. Section 11 (7).

Initial success is normally to be expected, but the plan must cater for the main difficulty—the continuation of the advance against unlocated resistance. For this, a reserve of mobile fire power is invaluable. Section 11 (8).

Distribution.—Section 11 (9 to 13). Two methods of attack are given, but, in either case, it is seldom advisable to cover the whole front with riflemen.

No rules can of course be given, but there are cases when one rifle company only need be used, *e.g.*, when there is a covered approach on one flank or when an intervening tactical feature is likely to impede the advance. But, if the front is wide, two companies should be used.

Never place M. G. Platoons under a rifle company, unless they are too far away for the efficient control of their own company commander. Note the rôles of forward, supporting and Reserve M. G.'s Briefly. M. G. fire is supplied at the outset by the supporting guns, whilst the forward guns go forward on wheels : the reserve guns are kept mobile for emergencies.

Co-operation with other arms.—Section 11 (14 to 22). Further points on barrages and concentrations are given. A timed programme should end when the enemy's dispositions are indefinite. After this, command of the bulk of the field artillery is decentralized and will take the form of observed fire directed by F. O. Os.

One or two sections of light artillery will usually be under the command of attacking Battalions but will seldom take part in the initial fire plan. Their lack of external communications makes it incumbent on the infantry keeping in close touch. Note the questions. Why, What, Where and When.

Note the reasons for exact timings when tanks co-operate with infantry. Tanks require time for adequate reconnaissance, and need the assistance of the infantry and artillery in dealing with the enemy's anti-tank weapons.

Further Preparatory Action.—Section 11 (24) (25). All new and close study is essential. See also its counterpart in defence—Section 21 (14).

Conduct of the attack.—Sections 11 (26 to 32) and 12. The tactical handling of the Battalion requires more skill with three rifle companies than it did with four. In the past, there was a tendency to pass two reserve companies through the two forward companies when they were held up : this was often wasteful in resources, as one forward company might still be fit to carry on, and the value of ground might be overlooked. There are now three alternatives. Firstly, a fresh fire plan may be all that is required. Secondly, if the enemy has a flank, the third company may be aimed at the flank whilst the enemy is held frontally. Lastly, the third company may maintain the momentum of the attack in place of the company that has suffered most severely.

Within the company, the forward platoons (let us assume there are two) may be quite capable of advancing, if more fire power is available. As, however, they may be in exposed positions under heavy fire, it will often be best to pass through the two reserve platoons from behind, where they can have got details of the fresh fire plan. An exception to this is when tanks give the fresh impetus, as then it is not necessary to obtain the details of the fresh fire plan. Infantry are trained to go forward directly the action of the tanks makes this possible.

Battalion Commanders must go forward to reconnoitre whenever the situation is vague, and to supervise directly the objective is gained—all commanders must ensure the security of captured objectives.

The rifle platoon in the attack—Section 13. The Company Commander usually gives the line of advance for each platoon. The Platoon Commander has then to make the best use of ground, so as to get his men forward without excessive losses. By reconnaissance, forward and to the flanks, a way will often be found where none seemed possible.

Local situations constantly arise which can be dealt with promptly by the light automatics under the control of the Platoon Commander.

If the enemy has not been definitely located, one rifle section should move far enough ahead of the Platoon to guard against surprise.

Attack on an organized trench system.—Section 16. Infantry cannot advance by day against M. Gs. and unbroken wire. Tanks are best for making gaps in wire, and should precede the infantry. If tanks are not available, artillery and mortars can be used to cut wire, infantry being responsible for keeping the gaps open (except in rearward wire) by constant patrolling and fire from M. Gs. and other automatics.

The Commander allots intermediate objectives which often coincide with the various defensive positions of the enemy.

Consolidation of a captured position.—Section 17. Mostly new and much fuller than in the O. E.

Chapter III.—Defence.

General considerations.—Section 19. Note the continual emphasis on concealment. It must continually be borne in mind. Observation is essential to the attacker.

Control is important, as defensive action entails a certain measure of dispersion. The defender must be ready to act quickly as soon as the intention of the attacker is disclosed.

The Selection of a defensive position.—Section 20 (1 to 11). The place and time of the enemy attack will never be certain. The defence must aim, therefore, at upsetting his forward movement and assembly, and must protect its foremost infantry localities with such a belt of fire from all weapons that the enemy cannot penetrate. As the most likely time of attack is at dawn or night, the defence must organize its artillery and machine gun fire to be maintained even when hostile movements cannot be observed. Section 20 (10 and 11).

Anti-tank defence, especially such obstacles as river lines and woods, needs full consideration. The enemy must not be allowed to reconnoitre a river obstacle. He will then be forced into a special operation to gain contact with the obstacle. Section 20 (2).

Troops may be pushed out in front of the defended localities either to guard against surprise or to delay the enemy. In the first case, their rôle is mobile and a few detachments from forward battalions may be sufficient in the second, their rôle is resistance and they must occupy positions and be effectively supported. Section 20 (4).

Fire.—Section 20 (11 to 14). Harassing, counter-preparation, and defensive fire are fully dealt with. Note that machine guns may be used on any of these tasks, and form the framework of the defensive fire plan. Note the need of rearward O. Ps.

Note the difference in the rôles of Forward, Supporting and Reserve machine guns: the support by machine guns of a counter-attack: and the duties of commanders in ensuring co-ordination of defensive fire.

The Battalion in defence.—Section 21 (1 to 10). The machine gun arcs of fire and dispositions are of primary importance. Their commanders must be told at the outset when they are to be ready to open fire, and also must be given time to reconnoitre and lay out lines of fire in daylight.

The orders from superior commanders are again clearly set forth, Section 21 (1 and 3), as also are the value and contents of a warning order. Section 21 (4).

On his reconnaissance the Battalion Commander may have his rifle company commanders with him or they may meet him later: he must consider, *inter alia*, the relative importance of concealment as against cover from fire.

A wise use of machine guns can often reduce the calls made on rifle companies, and may enable wide fronts to be held in open country. But beware of over-extension. Section 21 (7). By day a proportion of machine guns can be sited to hold the front, and in open country need only be assisted by patrols and a few protective posts on hidden approaches. By night, however, it will be necessary for rifle companies to hold forward localities, and for wide patrolling. Unless, therefore, the position is to be held only by day, frontage depends on night requirements. Section 21 (7).

As regards artillery co-operation, note the uses of light and medium artillery, and the value of silent guns. Section 21 (11).

As regards anti-tank defence, note the siting of infantry in tank-proof localities, and the uses both of anti-tank and dummy minefields. Section 21 (12).

Patrols.—Mobile warfare has been kept in view more than before. Note especially Section 24 (8).

Reserves.—Section 26. It is important to note that :—

Reserve Sections and Platoons always occupy positions.

Reserve Companies usually occupy positions.

Reserve Battalions may or may not occupy positions, but in any case a position will be reconnoitred, and some machine guns may be placed on it.

Counter-Attacks.—Section 26 (3 to 7). Immediate counter-attacks are usually delivered by reserve platoons and companies, but reserve companies may often be better used to stabilize the situation by fire so that a reserve battalion may put in a deliberate counter-attack later.

A counter-attack becomes " deliberate " by reason of the more detailed preparations for co-operation rather than by the size of the force engaged. Section 26 (6).

The best way to eject an enemy from a captured position is first to shake his morale by the fire of all available weapons, and then to launch a counter-attack. Section 21 (20).

Protracted defence.—Section 27. There is only one degree of resistance, and this applies to both the outpost and the main position. So clear orders must be issued if the commander decides to withdraw from the outpost position.

Chapter IV.—Protection.

General considerations.—Section 29. A force within striking distance of the enemy's main forces can only be considered as secure if it can fight at short notice. It must, therefore, be so disposed that it can deploy rapidly.

Advanced Guards.—Section 30. An advanced guard must seize and hold ground needed for observation by the main body, if it is unable to overcome opposition. Section 30 (2).

Section 30 (8 and 9) are mostly new and deal with the degree of deployment of the vanguard infantry, and the handling of the vanguard machine guns.

After the mounted troops have gained contact, and advanced guard may deploy on a wide front (within the limits needed for control) so as to locate the enemy's flanks.

Constant reconnaissance is important by the leading troops to find out the dispositions of the enemy and of neighbouring units, by the reserves to find out forward dispositions and the best lines of advance. Section 30 (15).

Rear-guards.—Section 32. When the pursuit is not close, the unnecessary deployment of infantry is to be avoided. If the main guard uses more than one road, each portion finds its own rear party.

When in close contact, great depth will not be needed if the ground affords concealment and good scope for the use of infantry weapons. If the front is wide, it may be necessary to put M. G. platoons under command of rifle companies. Vehicles should be kept as near the gun positions as is safe so that the guns may get away quickly. Greater strength and depth will be required in close country. Section 32 (11).

The Rear-guard Commander co-ordinates the withdrawal of the rear parties by fixing a time at which either the last troops are clear of the forward localities or at which they cross a given line in rear. Also it will often be advisable to fix the time the withdrawal may begin. Section 32 (13).

Some machine guns should form the backbone of the rear parties, but only the minimum number of men needed to bring the gun out of action should stay behind until the final withdrawal. Some fire should be kept up from each important locality until the last moment.

Closely pressed infantry can often be best extricated and withdrawn under cover of a counter-attack by tanks. Section 32 (16).

The Rear-guard Commander should not be made responsible for the demolition plan, though he should know its details. Section 32 (17).

Protection at rest.—The four pages containing Section 33 (4 to 12) are new and must be studied very closely.

Note especially that a force, beyond striking distance of the enemy's main forces, is unlikely to be subjected to a co-ordinated attack by infantry supported by other arms. It is, however, liable to raids from any direction by A. F. Vs. and troops brought up in M. T. under cover of darkness. It must, therefore, push out detachments to block all roads and approaches *leading from any direction* into the area. Troops in rear will also be responsible for protective measures in their allotted areas, and, in addition, will protect the services of supply and maintenance.

Within striking distance, a force will be disposed on its battle frontage so that it can fight quickly if attacked, and is ready to meet any form of attack. Lines of approach, such as roads, tracks, railways, etc., and the bottoms of valleys or the tops of ridges in open country, must be strongly held at night. By night not less than one-third of each detachment will be awake and manning its fire position. Section 33 (17).

Most of Section 34, protection from aircraft, is new. Note especially the need for rapidity in dealing with a low-flying attack Section 34 (3 to 6), and the measures for local protection. Section 34 (13).

Chapter V.—This chapter is very much the same as in the O. E. Note Section 35 (2).

Night operations.—In a night advance strong fighting patrols will precede the troops, for local protection and ground reconnaissance Section 44 (4). In a night withdrawal, some machine guns will be among the last to go. Section 45 (3).

Section 47 (1 and 2) on night attacks is mostly new. Note the need for reconnaissance by day down to Platoon Commanders. An officer will be in charge of each selected view-point to ensure secrecy. The ground will also be viewed by night to fix visible landmarks.

Objectives should be so selected that they can easily be found at night. The key localities of the enemy position should be captured but ground in between can be left until it is light enough to see when battalion reserves and tanks may be used. Section 47 (2 and 6).

The pace to the forming-up places will be very slow, and columns must be kept closed up. On arrival, each platoon column will deploy, and a short halt should follow during which leaders verify their positions and the line of advance. Section 47 (4).

Once the enemy is roused by the assault, artillery fire is put well within the enemy's positions and also to protect the flanks of the attack. Section 45 (5). Exploitation should be left until daylight. Any objectives not taken by night can then be attacked with adequate supporting fire. Section 47 (6).

Note the five important points on consolidation. Section 47 (7).

Ammunition Supply.—Chapter VII. Note the points about machine gun ammunition in Section 51 (2) (3 iv) (7).

Working parties and tasks.—Chapter VIII. Note Section 52 (1) and in 52 (2) that infantry commanders are responsible for the siting, organization and construction of their own defence works, and that the officer ordering the work must arrange for any protective troops needed. Also, that, as the number of available tools will often be insufficient, it may be advisable to double-man the tools. Section 59 (4).

Assault Bridging.—Chapter IX. Crossings may be effected silently or covered by fire. They are usually best carried out just before it gets light, but a daylight crossing may often be necessary. Infantry must be ready to exploit all other means, such as rafting and ferrying, as well as assault bridges.

The Engineers transport and deliver assault bridge equipment as far forward as their M. T. can go, and they maintain the bridges when constructed. Section 60 (2). Note the definition of, and the requirements for a bridge-forming point in Section 63 (1).

The bridge must be kept as straight as possible since the joints allow very little lateral play. Direction can easily be changed by wheeling the bridge as a whole, either on the centre or on either end. Section 64 (1). If the current is very strong, the bridge may have to be pulled across from the far bank, by a few men sent across with the covering party for this purpose. Section 65 (2).

Conclusion.

Comment has already been made on the better arrangement of the present edition. The position of the Chapter on Protection and its contents do, however, seem rather an anomaly, as, having attacked the enemy for 51 pages and defended ourselves against him for 50 pages, we suddenly find ourselves marching forward again to gain contact with him.

It is realized that this chapter has inherent difficulties, and that invariable rules cannot be laid down. Still, it is suggested that continuity of action might be better attained, if Advanced Guards were put as a prelude to the Attack Chapter, and Rear Guards as a prelude to the Defence Chapter. The "General Principles applicable to all forms of Protection" might well be included in Chapter I, Battle, and the Protection Chapter limited to the two extraneous forms, *viz.*, Flank Guards and Outposts.

AN HISTORIC DURBAR.

The meeting between Lord William Bentinck, Governor-General, and the Maharaja Runjeet Singh, at Rupar, October 1831, as described by Colonel James Skinner, C.B.

By Colonel E. B. Maunsell.

The following account has only just come to light. The original is an heirloom of the Wood family, and is in Skinner's own handwriting, clear and legible, though the ink has faded. Skinner's memoirs and reminiscences were, curiously enough, written mainly in Persian. The forwarding letter was written to Mr. Wood, who, so the family tradition states, married the daughter of the Rajput officer who lay beside Skinner, desperately wounded, on the field of Oniara. In this connection there is a tradition in the Skinner family that, when the ladies of Delhi were working an altar cloth for the church this old half caste adventurer was building in memory of the horrors experienced on that occasion, Skinner took the letters, I. H. S., to be complimentary to himself, these being his own initials. With regard to the Durbar, Skinner makes the very pertinent remark "The meeting with Runjeet was very grand on his side, on ours, very poor." This is in full accordance with contemporary accounts of Bentinck's character for pettifogging economies. It was this Governor-General, it will be remembered, who was responsible for the mean "half batta" order which reduced the small allowances of officers while retaining those of the sepoys. This, coupled with his fatuous "gesture" of abolishing flogging for sepoys while the punishment still remained in existence for British soldiery, had no small effect towards ruining the discipline of the Bengal Army, which culminated in the Mutiny twenty-six years later.

Skinner, in this note, also observes, "Runjeet is a noble fellow, and the only good chieftain of the old days remaining. After his death there is no one to manage his affairs, and John Company will, of course, do it." Runjeet was then fifty years of age, and, on the last day of the Durbar, joined in with some of his own troopers, and with men of Skinner's Horse, at equestrian feats, Skinner observing, "I could not help admiring his fine spirit."

This was the second occasion when Skinner crossed the Sutlej. In 1805, acting as advanced cavalry to Lord Lake's army in pursuit

of Holkar who was desirous of seeking shelter with Runjeet, then a budding chief, the adventurer, with a couple of troops and a galloper gun, was the first man to plant the British standard on the far bank of the river, and his mare was the first animal of the British camp to drink the water of the Hyphasis—the Beas—of Alexander the Great, and in close proximity to the altar erected by that world's conqueror.

Although in 1831 Skinner had served the Company, on and off, for the last twenty-eight years, he was not a regular officer, but, as a special compliment, he was placed on the roster as a Field Officer, and commanded the outposts in his turn. He was much gratified by this, for never before had he commanded European troops, the 16th Lancers and 31st Foot being the regiments present.

Runjeet Singh's troops, who were reviewed on this occasion, had come into being in a curious manner, for the Sikhs, like the Mahrattas, in the days of Lake and Wellesley, had only been horse soldiers, and very irregular at that. In 1809, Charles Metcalfe had been sent to negotiate certain terms with Runjeet who was now imposing his personality on the whole of the Punjab, as also on Sikh States on the British bank of the Sutlej. Metcalfe happened to be at Amritsar when the Muharram festival took place, and the Mussulman sepoys of the escort celebrated it in the usual manner. This infuriated the fanatical Sikh Akhalis, who attacked the camp. The Company's sepoys, well disciplined, but totalling only some two hundred all told, met the overwhelming numbers of the Akhalis in the most steady manner, utterly routing them. Runjeet was so impressed with what he heard of the occurrence that he resolved on forming an army, to be trained and disciplined in the European manner. The Colonel, Allard mentioned, together with Ventura and Avitabile, were the adventurer officers who, in common with sundry British, entered his service and who welded the Sikhs into the formidable soldiery we met in the war of 1845. In this connection Avitabile became the Governor of Peshawar, the only European who governed in India in an Oriental manner, with the gallows at the city gates.

In the initial preparations for the Durbar "the Seiks cleared a fine space and planted a garden, in the centre of which the royal tent was to be pitched. Wheat had been sown too, in the shape of men, birds and animals, in which form it grew up for the amusement of the chief, as well as gave verdure to this royal and magnificent encampment, while a bridge of boats sufficiently strong to allow the

passage of the royal sowarees, consisting of elephants, horses, etc., was erected. Nor did a single accident occur." The "bungalow of silver" referred to below could be moved about as necessity dictated, Runjeet and Lord William taking their seats thereon and being able to see over the heads of the crowd. With regard to the entertainment given by the Maharaja, Skinner tells us that the whole "formed a perfect specimen of Indian luxury and magnificence"—and this old adventurer had seen much magnificence in his early days, particularly under his first master, the great de Boigne, who fully realised its importance in the East. Runjeet Singh, in his cups, was wont to become "very high spirited" and somewhat inconveniently hearty. On this occasion he pelted Lady William Bentinck, in common with the nautch girls, with gold dust "and he seemed much to enjoy the joke." On the other hand his chieftains appeared unable to carry their liquor as gentlemen should, "and, instead of the manners of noblemen, displayed those of village churls."

Runjeet Singh, in his enthusiasm, went so far as to present Lord William with his famous horse "Loylee"—this was well on in the evening—and his Lordship wisely declined acceptance. The reception was an unqualified success.

The results obtained by the Durbar were incalculable. Had the Sikhs proved hostile during our troubles in Afghanistan eight years later it might have proved impossible to redeem the situation, for the Khyber line of advance would have been closed.

The total number of Sikh troops present was estimated at being some fifteen thousand horse, seven thousand infantry and twenty-five guns.

Skinner's Diary.

25th October.

Runjeet Singh arived in his royal tent this morning at 8 a.m. A deputation consisting of Mr. Prinsep, General Ramsay and two other officers, escorted by 60 sowars from Skinner's Horse, went over and was received with a salute of 15 guns. His son, Kurruck Singh, paid the Governor-General a visit and was received by a salute of 17 guns and took his leave at 12 a.m. The Royal Tent is made of red velvet and the outer kunnauts of yellow satin. There is also a bungalow of silver about 16 feet square.

26th.

All our troops formed a street from the Governor-General's tents towards his camp. The Maharaja arrived at 9 a.m., escorted by a thousand horsemen dressed in silk velvet also rich armours. As he passed every corps saluted, the Company's colours only dropped. The Governor-General with all his suite received him about 100 yards from the Government tents, went into his Howdah and put a string of pearls round his neck. After asking after each other's health, about 200 trays were brought in containing shawls, silk, velvets, *Kum Khaub* and other manufactures, also several double barrelled guns and pistols besides two horses and two elephants which were all presented to the Maharaja. He returned about 10 a.m. with the same salute of 21 guns. The horsemen that accompanied him, about 300 were good, the rest very indifferent. The French Lancers were only a mockery of discipline and the horses badly disciplined.

27th.

This morning His Lordship returned the Maharaja's visit at 7 a.m. Kurruck Singh met His Lordship about ½ a mile on our side of the river when he crossed the bridge of boats and was met by Runjeet with all his Sardars. His Lordship shook hands and went into the Maharaja's Howdah. They then passed through a street fully a mile in length formed by Runjeet's troops, both infantry and cavalry. The Durbar was surrounded by large silk kunnauts inclosing a space about 2,000 yards square. It was made of scarlet broadcloth lined on the inside with yellow velvet worked with gold. The carpets were all shawls, rich and superb. The household horse (dismounted) were arranged in ranks in different places. Upon the Lord dismounting, he was received with a salute of 21 guns. He was seated on the left of the Mahraj—Kurruck Singh on the right. Near Runjeet sat Captain Wade, acting as interpreter—then 200 of his Sardars, and then our own officers according to their respective ranks.

When we were all seated a band of about 100 young women came in, well dressed and jewelled. After their salute they sat down on our left. Some had arrows in their hands, and some bows. Their commanders held staffs of order in their hands and wore yellow turbans inclining on one side which made them look very handsome. After singing a little they retired.

The presents next came. They consisted of about 190 trays of the different rich manufactures of the country. Runjeet put a string

of pearls round His Lordship's neck besides two horses and an elephant with rich trappings. After receiving these, His Lordship got up and looked at all the magnificent tents, etc., etc. After which he took his leave with a salute of 21 guns. Everything was well managed and in the Royal way of Hind. The Maharaja was dressed very richly with jewels and wore on his left arm the famous diamond called the Khoe Noore. We returned to our tents at about 11 a.m.

28*th.*

Troops all paraded at 3 p.m. Maharaj arrived about 4 p.m. with about 200 soldiers and sardars. His Lordship also accompanied him with all his staff. The Maharaja inspected the troops very minutely. When the manœuvres commenced he was so delighted that he was going about alone among the troops with the greatest confidence and asked the General to perform some of the manœuvres again. Of our squares he said "They are like a wall of iron." He departed about sunset quite delighted. He presented 11,000 rupees to the troops. He proved himself superior to any native and seemed rather to have the understanding of an English Field Marshal and, in fact, moved about as though he were himself commanding the troops.

29*th.*

The review of Runjeet's troops took place to-day and was one of the grandest I have seen. In the front of the parade stood the silver bungalow, or rather, temple, for it resembled one in shape. In the upper part of this sat Runjeet with the Lord and his staff. The rest of the officers were seated below under shumianahs which were pitched close before the temple, and before the Durbar all the movements were performed. There were five brigades of infantry formed three deep, and each consisting of 1,000 men, chiefly Seiks, but mixed with some Mussalman and sepoys. The whole of this brigade, with about 15 or 20 gallopers, was under the command of a Seik general. After passing in review order they performed some English manœuvres, now out of date. They were done in slow time. Their firing (which they did both in line and square) was very regular—they were armed with muskets and dressed like our sepoys. There were three or four guns attached to them in all their manœuvres. Whether in line or square they always left a space for them and fired together. Of the cavalry, only one regiment called the Dragoons acted with the infantry. They are dressed in red jackets with steel

helmets and are armed with carbines and pistols. Monsieur Allard (a Frenchman, who was formerly in Napoleon's army) commanded them. He has taken much pains with them but they are still greatly inferior to our cavalry.

The rest of the cavalry were drawn up on each side of the silver temple and seemed the flower of his army. They are undisciplined and are perfectly in their native style. They were dressed in yellow silk and wore armour. Some of his own bargeers receive about Rs. 40 a month.

In the evening an entertainment was given by the Maharaja to the Lord and consisted of fireworks. His troop of females was likewise present and danced before the company. Runjeet was in high spirits and drank freely with the Lord. At the end of the party jewels and shawls were presented to Lady William, and a handsome armour to the Lord.

On the 2nd, the camp broke up—the Lord marched to Puttiala—Runjeet to Lahore, and the troops to their respective cantonments.

LETTERS TO THE EDITOR.

A Sanatorium for Indian Troops.

Sir,

Is there any sadder sight in the Indian Army than that of an Indian Soldier with consumption? The men who contract it are frequently those with long service, men whose resistance has been reduced by hard work and exposure in trying extremes of temperature incident to their service to the Sirkar. No men could be more deserving of many years of life and health to enjoy their homes and pensions. Once having been diagnosed "T. B." they resign themselves to an early death, and their friends, with that curious fatalism of the Indian, commiserate openly with them on the fact that their appointed day is near.

It is pitiable to visit them in hospital while waiting to be boarded out, and to see the sapping of their strength from week to week, and the quiet resignation to what they are convinced is certain death written on their faces. A case in my own battalion is fresh in my mind. All that the Army is able to do at present is to board them out with a maximum pension, knowing full well that there is little probability of their enjoying that pension for more than a few months.

I have talked to several members of the I. M. S. on the subject who were all of the opinion that in many cases a course of Sanatorium treatment in a fairly equable climate with good food would restore many to health. Unfortunately the Government has no funds available for such a step, but it is remarkable that no charitable institution exists for this purpose. Military Hospitals send to the Indian Red Cross the names of such cases, and the Indian Red Cross is supposed to arrange for their treatment in their homes. It is obvious, however, that the majority of such cases must be quite out of their reach, and the climate of their homes entirely unsuitable for a cure.

There must surely be old Army Barracks lying disused in some semi-hill station of the Punjab or United Provinces which could be converted without great expense to a Sanatorium for Indian troops. Their economic needs compared with ours are simple, and they would have a pension sufficient to pay for their food. What more clearly deserving use could be found for the subscriptions raised from Indian Units on Armistice Day. If these could not be made available,

many units would, I feel sure, gladly raise special subscriptions for this object, the cause being one which is repeatedly and painfully brought to the notice of all ranks. It would no doubt be difficult at first to get men to go to the Sanatorium, but once one or two cures had been effected, the applications would far exceed the initial capacity, and that pitiful look of helpless hopelessness would disappear from the faces of the patients in Military Hospitals. Moreover the British and Indian Officers visiting them would have a word of cheer for them.

I feel that the scheme only wants the patronage of some "Big Man," or of his wife to be taken up with enthusiasm throughout the Indian Army.

Yours faithfully,
D. B. MACKENZIE, MAJOR,
5TH BN., F. F. RIFLES.

MIR ALI, WAZIRISTAN:
31*st January* 1932.

HINDUSTANI.

SIR,

It seems very strange that Hindustani is not taught at our universities, military colleges and schools considering the vast importance of our Indian Empire. If you go into any good booksellers or second-hand book shop you will find no Hindustani books. In the old days you could get Forbes's "Hindustani Manual" at any of them. Unfortunately it is out of print long ago, and not procurable. Very often young officers going to India can find no one capable or willing to teach them. It would be a great advantage to all if the history, geography and languages of India could be taught in this country and our young men should be encouraged to learn all they can about India before going out to that country.

HOVE:
14*th February* 1932.

Yours faithfully,
G. BOWRING, LT.-COL.,
(*Retired*).

MOBILITY.

SIR,

May I make a few observations on that most excellent and instructive article entitled "Mobility" by "Light Infantry," which was published in the U. S. I. Journal of January 1932.

The writer proves, to my mind convincingly, that regular troops in India are capable of a high standard of mobility and explains—not

so convincingly—why they were accused of immobility in the Peshawar district during the summer of 1930, when they were compared unfavourably with irregular forces such as Scouts and Constabulary.

I think most people who know the North-West Frontier well will agree with me when I say that, as a general rule, officers serving with irregular forces on the frontier look upon regulars as ponderous and immobile and unsuited at ordinary times to mountain warfare against the agile and wily Pathan of Yagistan.

Now there must be reasons for this and I suggest that they are three in number, *viz.* :

(1) The principle of " Safety first."

(2) Inelasticity in training and in the use of equipment.

(3) Lack of knowledge of local conditions.

As regards (1), am I not right when I say that this is the principle which governs every action of the regular soldier on the frontier to-day ?

It cannot be that regular soldiers are more lacking in enterprise than they were in days gone by, for the Great War proved just the opposite, but, I submit, they are far more restricted in their actions than they ever were in the past on the frontier. Various reasons may be assigned to this, chief amongst them being the almost universal fear (which seems of late years to have sprung from nowhere) of getting casualties and the completeness and efficiency of present day communications.

The days of small and isolated detachments, when the man on the spot had to use his own judgment and act on his own initiative, are long since dead. Nowadays even the smallest detachment is seldom allowed out without the encumbrance of a telephone attached to it and whenever a young and enterprising commander wishes to carry out even the smallest operation he has to ask for orders. And how often is not the answer a lemon ? Is it small wonder then that the commander of to-day is inclined when in perplexity, instead of acting on his own initiative, to fly to his telephone for comfort ?

" Light Infantry " has quoted Tonnochy's raid as a fine example of pre-war mobility, but would such a daring enterprise ever be undertaken nowadays ? I very much doubt it.

As regards (2), *Inelasticity*, the Army in India is called upon to play many different parts on the frontier, as was evidenced in the Peshawar district during the summer of 1930, and before embarking

on any of them it is surely necessary, as "Light Infantry" suggests, to appreciate the situation.

How can a column of troops employed on such work as rounding up unarmed villagers hope to achieve real mobility if they are hampered, quite unnecessarily, with a whole outfit required for war? For such work lightly equipped soldiers with rifles, bayonets, 50 rounds S. A. A. per man, and unhampered by animals are quite sufficient for the job in hand and can be moved and rationed with the minimum of M. T.; but such a thing is seldom done. When troops go out for any job at all they almost invariably go out complete with the whole paraphernalia of war, machine guns, Lewis guns, ammunition, equipment, rations, transport, etc., sufficient to fight the German army, and they become very slow and cumbersome in consequence.

Lastly, we come to (3), lack of local knowledge, and this is a point which has a profound influence on the value or otherwise of troops stationed on the frontier.

Nowadays when the whole of the Indian Army has to take its turn of duty on the frontier there are many who claim to be "frontier experts," but how few really know much about it and how very few can talk the language. It doesn't matter so much about the men, for they merely have to obey orders, but it is the officers, both high and low, who are able to influence the situation for better or for worse, according to their knowledge, or lack of knowledge, of frontier conditions.

Think what a difference the presence of even one officer in a regiment with a knowledge of Pushtu can make when acting in aid of Civil Power. Without local knowledge troops are often, so to speak, left wandering in the dark, whereas a few jokes cracked by a Pushtu speaking officer with a headman over a cup of tea in the village *Hujra* may turn what appears to the uninitiated to be war in hostile country into perfect peace in a friendly atmosphere.

Many incidents come to mind of woeful ignorance of local conditions during the summer of 1930, where a little more knowledge of the Pathan and his characteristics might easily have changed warlike gloom into cheerful optimism and brought much sunshine into the lives of many of the P. B. I. in Peshawar Cantonment.

Yours faithfully.

12*th February* 1932. "P. B. I."

Emergency Rations for Indian Troops.

Sir,

Whilst agreeing with your correspondent that the present emergency ration of Chenna Chebena, etc., is not very satisfactory for Indian troops, I do not agree that the ration suggested of tinned cheese and onions is a suitable substitute.

As is well known the food value of cheese is high but that of onions in comparison with their bulk is low, for this reason onions are particularly unsuitable as a component of an emergency ration, where food value in comparison with bulk is of such importance.

Sufficient quantities of tinned cheese could not be obtained from the trade in emergency in India, so if cheese is to be issued as an emergency ration, stocks will have to be maintained in peace. Cheese even if properly tinned requires frequent turn over in hot climates. Very little cheese is issued to troops in peace, neither is it an article which could be issued as a substitute for any of the articles which form the present ration. If tinned cheese is introduced as an emergency ration, in addition to heavy initial cost, a considerable recurring expenditure will be necessary to ensure that it is frequently turned over to avoid deterioration.

It therefore seems to me that an emergency ration, besides containing the necessary nutriment and being palatable to all classes of Indian troops, must either :—

(*a*) Require little or no turn-over ; or,

(*b*) Be issuable as a normal ration article or substitute to enable stocks to be turned over.

Articles which require little or no turn-over are usually of the concentrated food type and would be unacceptable as an emergency ration to most classes of Indian troops. On the other hand most suitable articles which require turn-over and which are not at present included in the peace scale of rations or equivalents can be excluded on the grounds of expense.

It would therefore appear that however unsatisfactory the present ration may be, its replacement is very difficult, for we are practically limited to an emergency ration composed of articles which can be issued as normal rations in the peace scale.

Yours faithfully,

S. G.

Piquetting on the Khajuri Plain.

Sir,

I should be grateful if you would allow me to correct a misapprehension which may have arisen from the last sentence of the article "Two Recent Actions against Afridis" which appeared in your January number. Here it was stated that "In a 'through' march, the necessary piquetting could have been carried out with two and a half battalions." The distance of this particular advance was only $2\frac{3}{4}$ miles and, obviously, if officers are taught that two and a half battalions can piquet only $2\frac{3}{4}$ miles and that teaching is carried out, a force will never get anywhere in mountain warfare.

Actually on this occasion, as explained on page 86 of the article, the route was piquetted more thickly than will usually be possible because of the extremely big and intricate country and because one battalion was required to occupy what really amounted to a defensive position on the final objective. In addition the Brigadier wished to give every battalion a chance. Hence the "Battalion Block System" was adopted, and 30 rifle platoons ($2\frac{1}{2}$ bns.) piquetted only $2\frac{3}{4}$ miles. The actual distribution was:—

On piquet	..	$17\frac{1}{2}$ platoons.
In company reserves	..	$3\frac{1}{2}$,,
In battalion reserves	..	9 ,,

This very well exemplifies the disadvantages of the "Battalion Block System," which maintains battalion organisation and ensures decentralization, but wastes an impossible number of men. Under the "Permanent Advanced Guard and Rear Guard System" company reserve platoons are advisable when available but the battalion reserve platoons, in this case nine of them, would have been saved. Thus in this particular instance with thick piquetting and difficult country, a battalion would piquet 1·57 miles. Battalions were very weak, not much more than half strength, and platoons and sections correspondingly depleted.

Undoubtedly the organization of battalions as three rifle companies and a machine gun company has reduced the length of march which a battalion can piquet, but it must be able to piquet two miles at least instead of the former three, or a brigade will never march any distance.

Yours faithfully,

"MAJOR GENERAL."

MILITARY NOTES.

ARGENTINA.

Elections.

The Provisional Government, set up by General Uriburu as the result of the revolution in September, 1930, issued a decree on 8th May, 1931, convoking general elections for the presidency, vice-presidency, national and provincial legislatures and executives to take place on 8th Novermber.

Owing to sweeping reforms by the Provisional Government, all the members of the old regime had been removed from office, and for the second time in 69 years the nation had to choose every Federal and State elective officer simultaneously. Such an important election naturally aroused great interest in Argentina and throughout the world.

The candidates for the presidency and vice-presidency put forward by the various political parties were :—

General Justo and Dr. Roca	..	National Democratic Party (mainly Conservative).
Dr. de la Torre and Dr. Repetto	..	Democratic Progressive Party and Socialist Party.
Dr. de Alvear and Dr. Guemes	..	Union Civica Radical (associated with the regime of the late Irigoyen Government).

Before the election two events occurred which had an important influence upon it. On 8th October the Provisional Government vetoed the candidature of Dr. de Alvear on constitutional grounds because six years had not elapsed since he had held office as president, and also on the grounds that he had been connected with the Irigoyen regime. At the same time they annulled the Buenos Aires provincial elections of 5th April, 1931, which had resulted in the election of a Governor and Vice-Governor who were members of the Union Civica Radical and adherents of the Irigoyen regime.

As a protest against this action by the Provisional Government, the Executive of the Union Civica Radical, which is the strongest political party in the country, decided on complete abstention from the elections.

The elections were held throughout the Republic on 8th November without any serious disturbances. By 23rd November the counting of votes was sufficiently advanced to make it certain that General Justo and Dr. Roca would be elected President and Vice-President.

BELGIUM.

Albert Canal.

The second stage of this canal, that between Brigden and Hasselt, which connects the valley of the Meuse with that of the Scheldt has been commenced.

This section presents much greater difficulties than did the first stage between Lanaye and Brigden and it is estimated that the work will occupy at least three years.

Gas in the Meuse Valley.

During the month of October the committee appointed to enquire into the source of the lethal gas which did such damage in the valley of the Meuse during December, 1930, presented its report. The calamity is attributed to the presence of Sulphur Dioxide in the fog which hung for several days over the afflicted region.

This product, ejected in large quantities into the atmosphere by the numerous factory chimneys in the valley, is transformed by contact with the air into sulphuric acid. That this phenomenon should have had the effect that it did, was due to an exceptional combination of circumstances; absence of wind during several days, a low temperature together with the existence of a thick fog, which had a natural tendency to accumulate in a valley forming a basin surrounded with hills.

FRANCE.

Disarmament propaganda.

There is considerable Press propaganda on the subject of the Disarmament Conference in which attention is always drawn to the German semi-military organizations such as *Stahlhelm*, &c., and to the efficient methods of concentration of these bodies for demonstration.

Corsica.

A determined attempt is being made to suppress banditry in Corsica. *Gardes mobiles* and armoured cars have been sent from France for this purpose and are following the scheme drawn up by General Huot, commanding the *Gendarmerie* of the 15th Region.

Conseil Supérieur de la Guerre.

1. The *Conseil Supérieur de la Guerre* is now composed of the following Marshals and *Généraux de Division* :—

General Weygand, Vice-President (Inspector-General of the Army).
Marshal Petain (Inspector-General of National Air Defence).
,, Lyautey.
,, Franchet D'Esperey.
General Gouraud (Military Governor of Paris).
,, Guillaumat.
,, Debeney.
,, Claudel (Inspector-General of Colonial Troops).
,, Maurin (Inspector-General of Artillery).
,, Walch.
,, Ragueneau (*Directeur des Hautes Etudes Militarie*).
,, Brecard (Inspector-General of Cavalry and Military Governor of Strasbourg).
,, Hergault (Inspector-General of the Air Force).
,, Naulin (Inspector-General of North African Troops).
,, Gamelin (Chief of the General Staff of the Army).
,, Dufieux (Inspector-General of Infantry).
,, Mittelhausser.
,, Belhague (Inspector-General of Engineers).

Of the above, General Brecard will pass to the reserve in October, 1932, on reaching the age of 65.

2. In 1932 about 18 general officers will go to the reserve, amongst whom will be Generals Serrigny, commanding 14th Region; Thevenin commanding 18th Region, and Putois, commanding 10th Region. General Baratier, formerly of the Allied Military Committee of Versailles, is due to go to the reserve in December, 1932.

Unveiling of Statue to Marshal Joffre.

A statue to Marshal Joffre was unveiled at his birthplace, Rivesaltes, on Sunday, 22nd November, 1931.

The French Government was represented by the War Minister, Monsieur Maginot, who presided over the ceremonies. Madame Joffre was the guest of honour. Five members of the *Conseil Supérieur de la Guerre* (Generals Gamelin, Guillaumat, Debeney, Claudeland

Mittelhausser), the Commander of the 16th Region (General Dosse), and a large number of other general officers connected with the district either by their present duties or by birth were present. Local senators, deputies, *prefets* and other dignitaries attended.

Belgium, Czechoslovakia, Great Britain, Greece, Spain, Yugoslavia and the United States were represented by their military attachés or other officers, other countries by their consels.

The ceremony opened with the reception at the station of the minister and generals, after which the cortege with an escort of Mobile Republican Guard proceeded to the Town Hall for an address of welcome and thence, *via* the house where Marshal Joffre was born, to the site of the statue. The roads throughout were closely lined by troops of the 31st Division, the 2nd Senegalese Division and the Indo-Chinese-Madagascan group.

At the base of the statue a series of speeches were delivered dealing with the character and achievements of the late Marshal, Monsieur Maginot summing up briefly the whole of his career. The presence of foreign representatives was most cordially welcomed in several of the speeches. The statue was then unveiled and the troops marched past the Minister.

ITALY.

The New Secretary of the Fascist Party.

On 7th December it was announced that the resignation of Signor Giuriati from the Secretaryship of the Fascist Party had been accepted and that Signor Achille Starace had been appointed in his place.

Achille Starace is 42 years old and has a brilliant war record, having been decorated four times for valour and twice promoted in the field for special services. He was an active worker in the early days of Fascismo and organized the first party groups in the new northern provinces which Italy won from Austria as a result of the war. In 1921 he became Vice-Secretary of the Fascist Party, a post which he held until his appointment to the secretaryship. He is a lieutenant-general in the Facist Militia and a director of the *Dopolavoro* (after work recreational organization) in which latter capacity he has shown great energy, ability and drive.

The Italian Press points out, in connection with the appointment of Signor Starace and other new members of the party directorate, that they are all proved Fascists of long standing with experience in the provinces, and that their appointment should result in " bringing the perimeter into closer touch with the centre."

Operations in Cyrenaica.

The resistance of the surviving Senussi insurgents in Cyrenaica is said to be finally breaking down, and defections on a large scale are reported in consequence of a defeat recently suffered by them. On 11th December the three chieftains, Jusuf Rahil, Abdul Hamid El Abbar and Osman Sciami, together with about 100 armed men, attempted to break through the Italian cordon on the Egyptian-Cyrenaica frontier. Abdul Hamid succeeded in escaping, but his fellow chieftains were prevented from so doing and suffered heavy losses. Five days later Osman Sciami surrendered to the Italian authorities near Derna. On 19th December Jusuf Rahil and three other men were overtaken by Italian troops and, on their offering resistance, were shot down.

General Graziani, Lieutenant-Governor of the colony, in an Order of the Day states that " Only a few handfuls of men made to choose, between surrender or death are still offering resistance in the hinterland." He estimates that during the last 12 months 53 major and 210 minor engagements have been fought, in which 1,602 rebels have been killed. Four guns, 3 machine-guns and about 1,000 rifles have been captured, and large numbers of camels, sheep and horses have been confiscated. The Italian losses have amounted to 3 officers and 132 other ranks killed, and 6 officers and 257 other ranks wounded.

MOROCCO.

French Zone.

General.

General Naulin, Inspector-General of North African Troops, has recently undertaken a tour of inspection, visiting all military regions, districts and frontier zones. Most of the tour was carried out by aeroplane.

Operations.

(*a*) During the summer and autumn of 1931, in the Tadla region the troops on the I'Oued El Abid effected a junction with those in the valley of the Assif Ouirine in the Moulouya area. Tounfit was occupied after having been heavily bombed by aircraft. In three months 800 families have submitted.

On the Moroccan-Algerian border, the Saharan routes are policed and organized ready for the occupation of the Tafilalet as soon as orders are received to carry this out.

(*b*) In October, a methodical advance was undertaken so as to close in the dissident area on the south, troops based on Marrakech advancing eastwards from Imiter to join hands with those based on Bou Denib advancing westwards up the Forkla Valley. These operations being carried out under the supervision of the Commander-in-Chief, General Hure.

On 14th November, Foum-el-Souk, 15 kilometres east of Imiter was occupied without opposition.

(*c*) On 21st October, a djich which had pillaged camps of the *soumis* south of the Moroccan-Algerian border was engaged and dispersed by a mixed company of Moroccans and Algerians. The casualties on the French side were one officer wounded, two natives killed and six wounded.

The operations have continued successfully with very little fighting. The Marrakech forces advancing from Imiter, composed of six battalions, a squadron of *spahis*, one brigade of mountain artillery, a battery of motorised 75-mm. guns, two squadrons of armoured cars, and a squadron of aircraft, have occupied some 12 miles of the Todra valley at its junction with the Imiter valley.

A small force has been sent down the Dra valley from Agdz to Amzrou.

The eastern forces consist of eight to ten ba ttalions with artillery, armoured cars and aircraft, and are operating in four columns. A northern flank guard of two battalions, with a battery and two troops of armoured cars, has advanced from Mzizel to Agoudim and is to push on through Semgat to Amsed. Columns from Ksar es Souk and Tarda have occupied Tadiroust and Guelmina, respectively. Slight opposition was encountered at Tadiroust where auxiliaries had an

engagement with tribes from the southern slopes of the Grand Atlas, who were repulsed with heavy losses. The French losses were two French officers and eight other ranks killed, and six other ranks wounded. A southern column from Guelifat moved up the Gheris valley and has reached its junction with the Ferkla at Touroug.

The eastern and western forces are now less than forty miles apart. So far, 6,500 tribal families have submitted.

These operations, when completed by the establishment of posts, will close in the Ait-Atta, a troublesome nomadic tribe who live in the Sarro region, and will also cut off the main area of dissidence in the Great Atlas from communication with the south.

Visit of Sultan of Morocco.

The Sultan of Morocco has recently spent three weeks at Marrakech and visited Telouet on the eastern slopes of the Atlas, where the Glaoui of Marrackech has a fortified palace (*Kasbah*). Before the French Protectorate, the control by the Sultan of the Glaoui and his Berber tribes was very slight indeed.

Policy of pacification.

In a recent series of articles published in "La France Militaire," General Thievency, a well-known writer on Moroccan questions, has put forward a strong plea for the speeding up of the pacification. He claims that at the present rate, which is designed so as to avoid attracting parliamentary or public attention, the work will take 15 years. It will thus stretch over the lean period when the French conscript classes will be much reduced owing to the war, and, further, in this time any form of Islamic reaction might set in. He points out that once the task is finished, it will be possible to reduce the garrison by two divisions which will be most welcome to reinforce the *couverture* on France's eastern frontier, and that in case of war, Morocco will then be a source of strength instead of the potential weakness it was in 1914—18.

Port of Casablanca.

The same writer has drawn attention to the wonderful growth of Casablanca harbour in 20 years. Financed by a loan, the great breakwater, planned by Marshal Lyautey in the teeth of much opposition and technical scepticism, has proved a success ; of its final length

of 3,000 yards, 2,500 yards are already completed. The port has already an annual tonnage of 3-million which places it 8th among all French ports, and when completed it will be in area one of the largest.

PORTUGAL.

New Chief of Staff.

General Artur Ivens Ferraz has been appointed Chief of the General Staff of the Portuguese Army. He replaces General Amilcar Mota, who passes to the Reserve.

General Ivens Ferraz was formerly Administrator-General of the Army. He was at one time President of the Council of Ministers and has also held the portfolios of the Colonies, Commerce, The Interior, Foreign Affairs and Finance, in different Cabinets. During the Great War, General Ivens Ferraz was Chief of the Portuguese Mission in England and Liaison Officer for the Portuguese Army with the British Army. He has also been Portuguese Military Attaché in London, and Governor of Mozambique. He is 61 years of age, and was promoted General in 1927. He possesses a number of Portuguese and foreign decorations.

New Police Force.

At a meeting held on 20th November, the Portuguese Cabinet approved a scheme for the creation of a new body to be known as "The Special Police of the Ministry of the Interior." The duties of the new force will be mainly the prevention and repression of attempts against the security of the State and crimes of a political and social nature.

SPAIN.

Gibraltar Tunnel.

By Decree dated 8th December, 1931, a new Commission has been appointed for the study of the project of constructing a tunnel under the Straits of Gibraltar, with Lieut.-Colonel Don Pedro Jovenois, promoter of the scheme, as secretary.

The sum of 25,000 pesetas has been allotted for expenditure in connection with these studies.

Army Reforms.

In a parliamentary debate, the War Minister said that in his army reforms this year he had simply tried to provide the Republic with a military policy, which Spain had lacked since the 18th century. The most obvious defect of the army, at the advent of the Republic, was the excessive number of officers. On an organization of 16 divisions, Spain has had as many as 22,000 officers, and as there were no men for all these officers to command, there were regiments with as few as 60 men and cavalry regiments with no horses. Notwithstanding the fact that his offer of facilities for retirement on full pay was received at first with scepticism, 10,000 officers have accepted it. Comparing the amount which the Treasury will be called upon to pay in pensions to these officers from August, 1931, until the death of the last one, with the amount they would have drawn in pay had they continued their normal advancement in the army, the eventual saving to the Treasury will be enormous.

In defining the real mission of the army, the Minster said, " If it is to be merely the prolongation of the Civil Guard to help to keep order in the country, it would be better for Spain to have no army. Let the police do that, or an institution of a different nature. The army is not for that. The Republican Army, in accordance with the military policy of the Republic, must be a school where, while preparing for an eventuality fortunately remote, its citizens must be compelled to fulfil a national duty and learn discipline, sense of duty, etc., Spain's external policy is not only one of peace, but of indifference, and we have no military commitments abroad except in Morocco ; and it is the Republican Government's intention that Morocco shall be defended by an army that is not the Metropolitan Army. The National Army of Spain will be prepared against a threat to her independence, or for the event of Spain being drawn into an armed conflict in Europe."

Referring to the excessive expenditure on different services, the Minister said that horse-breeding alone cost the State 18,000,000 pesetas, and the price of each horse worked out at over 4,000 pesetas (approximately £100).

With the reduction of units, the Minister stated that regiments which formerly had 80 men have now 1,200.

In regard to armament, Senor Azana said "We have nothing, neither guns, rifles nor munitions. I realize the seriousness of this statement, but neither I nor the Government wish to keep the responsibility of this secret to ourselves, the Cortes must know it and if you (addressing the members) wish us to have no army we will have none, but if you want one you must give the means needed to make it of some use. If you do not want to give the means, we will suppress the army." Senor Azana then entertained the House with the story of the Schneider guns, bought by Spain in 1908 or 1909, having a range of 9 kilometres. On the arrival of the guns Spanish experts considered the range too great, "for anything we can do in Spain 6 kilometres suffices," and so the guns were cut down.

Of heavy artillery there is very little; only a few regiments are beginning to be supplied. "There is no ammunition."

Of the aviation, he said, "it does not in reality exist, it is a dream for the future! There are hundreds of reconnaissance machines of no use, and as for heavy bombers—there is none!"

Senor Azana stressed the necessity of equality in military service. We strongly opposed the idea of a voluntary army, which must of necessity be small because it is so expensive and creates a type of professional soldier who immediately imposes himself on the civil authorities, and has not the same sense of equality and citizenship as the compulsory service soldier. "Equality in the army and compulsory service are, therefore, the two main principles of the military policy of the Republic."

Public Works.

A programme of Public Works, contained in a Decree of 24th November, has been submitted for the approval of the *Cortes*, the total cost of which is estimated at 409,138,724 pesetas (approximately £9,500,000). This programme of works extends over three years, and expenditure each year will be as follows:—

	Pesetas.
1931	60,169,993
1932	200,882,649
1933	148,086,082

These amounts to be included in the Ordinary annual budget. The total expenditure is allotted as follows :—

	Pesetas.
Roads	220,000,000
Ports	130,042,274
Hydraulic works	53,255,950
Mining works	5,840,500

The New Constitution.

The new Constitution was laid before Parliament and definitely approved by 368 votes on 9th December. There were no negative votes, but neither the Agrarian Party nor the Basque and Navarre Deputies took part in the voting, and several other deputies left their seats before it began.

Election of the President of the Republic.

Senor Don Niceto Alcala Zamora, adopted as the candidate for the Presidency by all the more important political parties, was elected President on 10th December, by 362 votes on a House of 466. A large number of members refrained from voting; only 13 votes were recorded in favour of other names.

Changes in army organization.

The personnel of Infantry Regiment No. 44, which has been disbanded in Morocco, will be repatriated and formed into two battalions as follows :—

(*i*) A. M. G. battalion with headquarters at Plasencia (Caceres).
Strength—
23 officers,
399 other ranks.

(*ii*) A battalion to form the 3rd Battalion of Infantry Regiment No. 17, and to be detached in Almeria.
Strength—
23 officers,
690 other ranks.
The rifle companies to have three instead of two platoons).

The newly created M. G. battalion will retain the colour and records of the old Infantry Regiment No. 44.

It will be known as the M. G. Battalion No. 2.

The M. G. battalion at Castellon will, in future, be M. G. Battalion No. 1.

U. S. A.

War Department Estimates.

President Hoover presented the Budget for 1932-33 to Congress on 9th December. Faced with an estimated deficit at the end of the current year of 1,717 million dollars (£353 millions at par) the Administration proposes drastic reductions in expenditure and increases in taxation.

Estimates for the War Department, military activities only, amount to 301 million dollars, a decrease of 33½ million dollars from the appropriations for the current year. Of this decrease 27¼ million dollars comes from the Vote for the Quartermaster Corps, and is accounted for partly by lower commodity prices and partly by a proposed postponement of the army housing programme. Other cuts of importance are made in respect of the Air Corps and the National Guard. No reductions are proposed in pay or establishments.

Further details will be published after the Estimates have been examined by Congress. In view of the fact that the Democratic Party, which is by tradition unfavourably inclined towards the Services, now controls the Lower House, it is very probable that further substantial cuts will be made from the Estimates.

Mechanization.

1. *Change of policy.*

The change of policy on mechanization is dealt with at some length in the Annual Report of the Chief of Staff of the Army. The following is an extract from this Report :—

"There have been two theories advanced to govern the application of mechanization to these tasks. The first is that a separate mechanized force should be so organized as to contain within itself the power of carrying on a complete action, from first contact to final victory, thus duplicating the missions, and to some extent the equipment of all other arms. The other theory is that each of the older arms should utilize any types of these vehicles as will enable it better and more surely to carry out the particular combat tasks for which it has been traditionally designed. Under this system mechanization would permeate the whole army, but it would be applied by each arm only as an additional means of securing victory.

In the initial enthusiasm of post-war thought the first method was considered as the ideal one. Mechanized forces were expected to supplant the established order, or at least to constitute a *corps d'elite*, to be supplemented where necessary by foot troops, which would hold defensively the advantages gained by the mechanized striking force. This was the controlling idea in the establishment of "mechanized forces" in our own and other armies, but continued study and experimentation have since resulted in its virtual abandonment. Inherent weaknesses and limitations in the machines themselves are such as to preclude their employment in many types of terrain. Moreover, the impossibility of having any considerable number of suitable armoured vehicles immediately available upon the outbreak of war is sufficient proof that such a doctrine is not applicable in any case to the early stages of a future emergency.

Accordingly, during the last year the independent "mechanized force" at Fort Eustis has been broken up. The cavalry has been given the task of developing combat vehicles that will enhance its power in rôles of reconnaissance, counter-reconnaissance, flank action, pursuit and similar operations. One of its regiments will be equipped exclusively with such vehicles. The infantry will give attention to machines intended to increase the striking power of the infantry against strongly held positions. Every arm is authorized to conduct research and experiment with a view of increasing its own power to perform promptly the missions it has been especially organized and developed to carry out. Every part of the army will adopt mechanization—and motorization—as far as is practicable and desirable. To the greatest extent possible machines will be used to increase the mobility, security and striking power of every ground arm, but no separate corps will be established in the vain hope that through a utilization of machines it can absorb the missions, and duplicate the capabilities, of all others."

2. *Organization of a mechanized cavalry regiment.*

Plans have been made to give effect to the new War Department policy of substituting a mechanized cavalry regiment for the Experimental Mechanized Force.

In May or June, 1932, the First Cavalry Regiment will move to Camp Knox, Va., where it will absorb certain elements of the disbanded mechanized force, and become the "First Cavalry (Mechanized)."

A certain number of transfers of personnel are to take place in the meanwhile, in order that officers and men who are not attracted by, or fitted for, participation in this experiment in mechanization, may be transferred to other cavalry units, their places being filled by selected personnel from other units and other arms.

No tank company or artillery battery is to be included in the regiment. Eventually another mechanized cavalry regiment may be added to form a mechanized cavalry brigade, and then some artillery will probably be assigned to the formation.

A tentative organization for the regiment has been announced as follows :—

Headquarters.
Headquarters troop.
Machine gun troop.
One covering squadron—
One troop of armoured cars.
One scout troop.
One combat car squadron—
Two troops of combat cars.

At present there is a shortage of suitable mechanical vehicles for the regiment. The armoured car troop will take over the armoured cars formerly with the Mechanized Force, namely, five light cars on commercial chassis and six heavier cars with 95 h.p. Franklin engines. Four Christie vehicles (wheel-cum-track hybrid tank-armoured cars) and one similar vehicle manufactured by the Ordnance Department will form the equipment of one combat car troop. The machine gun troop and the second combat car troop will be represented by machine gunners in lorries pending provision of armoured machine gun carriers and additional Christies respectively. Details regarding the equipment of the scout troop, or the transport provided for headquarters, etc., have not been received.

3. *Move of the Tank School and Tank Board to Fort Benning.*

As a further result of this change of policy the Tank School and Tank Board are to be moved to Fort Benning, where the Infantry School and Infantry Board are stationed. The Tank School is to become part of the Infantry School, but a separate course of instruction will be maintained.

NOTES ON MILITARY REVIEWS.

"Bulletin Belge Des Sciences Militaires."

September, 1931.

1. *The Operations of the Belgian Army during the Great War.*

Deals with the period of the winter of 1917-18, and discusses the evolution of tactical ideas during the course of 1917.

2. *The Belgian Defensive System.* By Colonel B. E. M. Michem.

Is a continuation of the article on the subject reviewed in this publication for last month and follows the same lines. The author examines the rival conceptions known as the *Plan Hellebaut* and the *Plan Galet.*

3. *Artillery Forward Observation in the Approach March.* By Lieut.-Colonel B. E. M. Douy.

Deals with the difficulties of artillery observation during this phase of battle and makes suggestions as to how they may be overcome.

October, 1931.

1. *The Operations of the Belgian Army during the War* 1914—1918.

The continuation of an account of the operations of the Belgian Army in 1918.

Deals with the allied efforts to achieve unity of command, and explains how, although the Belgian Army was never under Foch's command, perfect co-operation was achieved in practice.

2. *Pages of History of the Belgian Army in the course of the War* 1914—1918. By Lieut.-Colonel Lievin.

An interesting and lucid account of the action of a battalion which was attacked by the Germans in 1918.

Contains a careful description of the counter-attacks which were carried out to regain the lost trenches.

3. *The Citadels, or Permanent Fortifications in Ancient Times.* By Major F. Delvaux.

The first of a series of articles on this subject. Very interesting and the author evidently knows his ground.

NOVEMBER, 1931.

1. *The Operations of the Belgian Army during the War* 1914—18.

Deals in more or less detail with the operations on the Belgian front from 7th February to 28th March, 1918.

It is not particulary interesting or instructive to those not in the formations and units concerned.

3. *Pages of the history of the Belgian Army in the Great War.* By Captain Sclavons.

Quite an interesting account from a local point of view of the German attacks on 27th April north of Ypres.

This account—as was also the case in a similar article in last month's review—provides an instance of a successful counter-attack, and the point which comes out if one reads between the lines is the excellent support rendered throughout the day by the Belgian field artillery and the confidence with which it inspired the infantry.

3. *Anti-Aircraft Defence.* By Major-General Vandeputte.

The author of this article is the commander of the Anti-Aircraft Defence Regiment of Artillery and is considered a very capable artillery officer. He emphasizes the difficulty of getting defence aeroplanes into the air in time to deal with a hostile raid, particularly in the case of a small country, owing to the impossibility of deciding upon the enemy objective early enough. From this he deduces the enormous importance of ground defence.

The perfection of mechanical appliances for locating enemy machines and for aligning the anti-aircraft guns has been so developed that only a minimum of highly trained personnel are required to operate them. This is an important point in the case of an army consitituted like the Belgian one. He also draws attention to the fact that casualties to ground defenders are so small that they need not be taken into consideration. He points out the imperative necessity of organizing thoroughly the anti-aircraft defence of a country during peace time and of not waiting until a war breaks out before doing so.

4. *French Provisional Field Service Regulations.* By J. V.

A review of the new French Provisional Field Service Regulations drawing attention to the variations between it and the volume which it supersedes and pointing out the differences between Belgian and French organization and doctrine.

5. *The Kellogg Pact.* By C. D.

A clear and adequate *exposé* of the Kellogg Pact and the implications contained in it.

"REVUE MILITAIRE FRANCAISE."

September, 1931.

1. *The Effort to reach a Decision.* Part I. By General Faugeron.

The author draws attention to the factors of surprise in all efforts to draw lessons from one war for use in the next. In 1914 the Germans failed to reckon with the French power of manœuvre, and the latter did not recognize the value of fire power. Moltke's maxim as to the value of the tactical defensive resulted in the lack of drive by the 3rd and 4th German Armies, and thus enabled the French 4th Army to escape from the Ardennes.

The surprise of the nations at the long duration of the war brought discredit on the military leaders, and inspired various statesmen with hopes of taking the stage as masters of strategy.

2. *The Effect of Topography on the Battle of the Ardennes.* Part II, conclusion. By Lieut.-Colonel Pugens.

Continuing his narrative of the disaster to the 4th French Army, Colonel Pugens shows still further the effect of bad cavalry work added to the lack of grip in the higher command. A confused battle resulted in which the better trained German soldier proved his value. The French artillery could not come effectively into action. On one occasion, a French division and the German one opposed to it both retired precipitately in opposite directions, each under the impression that it was completely worsted.

3. *Aviation in Mountainous Country.* By Captain Seive.

A study of the difficulties of air co-operation with an army in mountains, with some suggestions for overcoming these.

4. *The 1st Corps from Belgium to the Marne.* Part II. By Lieut.-Colonel Larcher.

In following the movements of this corps on 29th August at the battle of Guise, the reader is bound to be impressed by the preponderating influence brought to bear on events by its commander. General

(now Marshal) Franchet d'Esperey kept in personal touch with his subordinate throughout the day, insisted on perpetual cavalry reconnaissance and thus was able at the critical moment not only to launch his own troops but to inspire confidence into the neighbouring corps commanders.

5. *Russian and Japanese Interests in Manchuria.* By R. C.

A close study of a most interesting problem, which since this was written has come to the forefront of the politicial stage.

Reviews.

Much attention is given to the new Italian regulations for preliminary military training of boys, and to General MacArthur's survey of mechanization in the United States Army, and to an Italian study of the evolution of war by General Ettore Bastico.

Other reviews deal with the large number of books on the colonies engendered by the exhibition at Vincennes.

October and November, 1931.

1. *The effort to reach a decision.* (Parts II and III.) By General Faugeron.

These articles are developing into a history of the war 1914—1918. The failure to reach a decision at the Marne is attributed to Von Kluck's army not being fixed before it was attacked in flank by the 6th French Army. The blame for this is thrown on the British who allowed their advance to be excessively retarded by a cavalry screen; Von Kluck could thus concentrate against and defeat Maunoury. There is an interesting discussion on whether the German left would have been sufficiently strong to withstand the French attacks around Morhange had Von Moltke not changed the original distribution in the Von Schlieffen plan. Full credit is given to the Russians for their East Prussian attack which ended so disastrously at Tannenberg. Von Moltke's successor, Von Falkenhayn, is dismissed as a pupil in the art of war and not a master, and as being indissolubly wedded to the strategic defensive. His effort at the tactical offensive at Verdun ended in failure.

2. *The Government of National Defence.* (Parts I and II.) By Chef de bataillon Guigues.

Describes the efforts of the French Government formed in Paris after the surrender at Sedan and the proclamation of the Third

Republic. Although Paris was invested, the Government remained there, sending a commission to Tours to control the rest of the country and carry on the war. The divided control caused much confusion. The only troops at the disposal of the Government were a few regulars and the National Guard. The latter was untrained and unorganized, hence of very little value. The author describes the methods employed to build up an army and the disastrous results from the decision that units were to elect their own officers.

3. *The 1st Corps from Belgium to the Marne.* (Parts III and IV.) By Lieut.-Colonel Larcher.

This is a detailed description of the fighting at the Battle of Guise, and of the complete disorganization at the end of the day.

4. *10th Russian Army and the disaster of Augostovo.* Parts I and II.) By Lieut.-Colonel Aublet.

A good lesson in how not to make war. The lack of liaison between army and corps headquarters led to a complete failure to appreciate the movements of the German armies who surprised and overwhelmed the Russian right flank while the C.-in-C. of the army was using every effort to reinforce his left. An interesting case is quoted when the C.-in-C. of the North-West front gave orders direct to C.-in-C. 10th Army, while his chief of staff gave very different orders to the staff of that army.

5. *The campaign of 1918 and the battle of 15th July.* (Parts I and II.) By General Goudot.

These articles are really misnamed as they are concerned merely with the action of the 4th French Army on the east of Reims. The tactics employed by General Gouraud, the discussions which led up to their adoption and the great success that attended them are very fully gone into. The German crossing of the Marne between Chateau Thierry and Reims, which at one time threatened to paralyse the French offensive in preparation near Villers-Cotterets, is not referred to.

Reviews.

Much attention is given to an article on British Field Artillery from the Journal of the Royal Artillery in July, 1931, and to General Charteris's book "At G. H. Q."

German military reviews are, as usual, discussed at length.

REVIEWS.

"MILITARY OPERATIONS IN TOGOLAND AND THE CAMEROONS."

By Brigadier-General F. J. Moberly (Price 15s. from H. M. Stationery Office).

This is the latest addition to the Official History of The Great War.

The first 41 pages deal with the conquest of Togoland, an area about the size of Ireland, garrisoned by a German force of some 300 Germans and 1,200 natives. The Germans, counting on neutrality in the colonies, had no plan of defence; while their ill-treatment of the native led him to welcome the British and French troops and greatly simplified the protecting of the Lines of Communication. The account of this campaign is concise and well-told and the one map is all that is required.

The remaining 400 pages of the volume describe the conquest of the Cameroons, an area 1½ times the size of the German Empire, defended by a force of some 8,000 rifles. This was accomplished by an allied force of approximately 15,000 rifles in 19 months.

The book is well illustrated with photographs that help the reader to visualize the difficult nature of the country. The 12 maps are clear and good.

The whole account is well written and brings out:—

(1) The hardships due to the bad climate.

(2) The ingenuity of the commanders in improvising all kind of transport on sea, by river and on land and the enormous numbers of carriers required in that part of the country where no other form of transport is possible.

(3) The difficulties due to lack of communications with, in many cases, roads little more than forest paths bordered by dense and impenetrable jungle, with enormous distances between columns and with the few existing telegraph lines destroyed.

The story of how the skill and tireless energy of the allied forces overcame these difficulties, in an unknown country with a population often afraid to act as guide, if not openly hostile, cannot fail to interest all readers.

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EDITORIAL.

Disarmament.

In what we are content to call the Dark Ages the Popes undertook many of the functions the League of Nations now attempts to perform. They organized international movements against what they believed to be dangers threatening Christendom, arbitrated between quarrelsome Princes, and at times enforced their awards by direct action either spiritual or physical. The Papal judgments in these mundane matters may not always have been sound, but in some instances at least they anticipated in a surprising way the efforts of present day idealists. One Pope even went so far as to propose what would now be termed 'qualitative disarmament'. He declared that the recently introduced gun-powder was an ungentlemanly weapon, more suited to assassins than to soldiers, and likely to increase to an untold degree the horrors of war. All enlightened Princes should, therefore, abjure its use and trust to honest steel. Perhaps he was right. But there was always the Turk outside the Christian League, and the Princes themselves soon realized that artillery concentrated in their hands was the answer to their troublesome nobles whose strongholds had up to then been such hard nuts to crack. So the Turk took no notice, while the Princes returned polite replies full of admirable and chivalrous sentiments—and ordered a few more culverins a couple of inches bigger in the bore than any yet designed.

The Geneva Conference, having discussed various schemes for the prevention of war and for disarmament, found it impossible to agree on the practicability of any of them. It reached, however, in its turn the old Papal conclusion that certain types of modern weapons should be anathematized. Unanimously the nations agreed that those weapons which are particularly offensive in character or which are aimed chiefly against the civil population should be banned

or at least greatly restricted in use. So far so good; it then only remained to pick out these weapons. Expert committees were formed to select them, and it was only after they had met that it began to be realized how extremely difficult it is to divide modern armaments into those that are defensive and those that are offensive.

Great Britain and the United States point to the submarine as incontestably offensive and directed mainly against the civil population; lesser Powers at once reply that it is their only defence against great surface naval superiority. Tanks and heavy mobile artillery appear essentially offensive to some nations; to others they are merely a defensive counter-poise to the overwhelming numbers of their neighbours' conscript armies. Even the bombing aeroplane, which at first sight seems from its very nature the most offensive of all weapons, is claimed as really defensive. If one nation prepares an aerial offensive against another, the threatened nation has no effective defence but to collect a force of bombers that will enable it to put the attacker's ground establishments out of action and thereby paralyze his bombers. Thus identical types of machines may be offensive on one side and defensive on the other. The obvious answer that if *all* bombers are abolished none will be needed for defence is countered by pointing out that big civil aircraft are all potential bombers, and they cannot be abolished. As the instructors used to say at the Staff College, "It's all very difficult".

An interesting point which has emerged from these discussions is that the weapons which, generally speaking, are accepted by a majority of States as offensive are identical with those denied to Germany and the defeated nations of the Great War—in fact they were denied to them because they were offensive. If the allied nations now deprive themselves of these weapons what will become of the victors' relative superiority? What of the Treaty of Versailles? France and the bloc of smaller nations she leads wish to perpetuate Germany's military weakness. It is an understandable attitude, but it is a grave obstacle to any real disarmament and could be removed only by great self-sacrifice on France's part or by some guarantee of security from the other Powers accepted as adequate by France. Prospects of the difficulty being overcome in the immediate future by either of these methods are not hopeful.

Realizing this the General Committee of the Conference adjourned to allow the leading statesmen of the Great Powers to meet and try to reach some agreement. There can be no doubt that if any real progress at all is to be made, the discussion must be raised above the level of the detailed arguments of experts. All the same one need not envy the statesmen their task.

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The Hoover Proposals.

Into the midst of the conferring statesmen the American President has thrown his disarmament scheme, which, whatever its merits and whatever its eventual fate, has put new life into the almost moribund Geneva Conference. In detail there is nothing new about his proposals. The reduction of capital ships and submarines by one-third, of aircraft carriers and destroyers by one quarter; the total abolition of tanks, heavy mobile artillery, bombing aeroplanes and aerial bombardment; and the scaling down of land forces, have all individually in some form or other been put before the Conference by other nations. There are, however, two innovations. Mr. Hoover has combined both quantative and qualitative disarmament in one bold scheme, and he has attempted to divide land forces into two categories, with different scales of limitation for each. His first category he calls the "Police Contingent", composed of the forces required to maintain internal order and to police frontiers; the second, the "Defence Contingent" consists of all forces maintained to meet the fear of foreign aggression, *i.e.* all land armaments other than the "Police Contingent". The strength of the "Police Contingent" is to be based on that allowed to the defeated Central Powers, which, according to Mr. Hoover, averages 2·32 per thousand of their total population. Nations with large colonial possessions are to be allowed an increase on this to 2·64 per thousand of their overseas population. The "Defence Contingents" of all nations are to be reduced by one-third in numbers.

As was to be expected the American proposals have met with a mixed reception. Italy, and of course, Germany, accept them as they stand; Japan is distrustful, especially of the naval clauses; Great Britain gives a somewhat qualified approval; France is definitely hostile.

The French attitude towards the Hoover scheme is one of intense suspicion. In French eyes it emanates from a doubtful source. France has not forgotten, and will never forget, that a President of the United States once promised her a guarantee of security against future German aggression and then failed to produce it. Mr. Hoover is on the verge of a presidential election and Frenchmen cannot dismiss the idea that this dramatic attempt to gain what Americans are fond of calling the "moral leadership of the world" is designed more as a vote catching device for use at home than as a carefully thought out solution of European problems. Their doubts are strengthened by the enthusiastic acceptances of Italy and Germany. Many of the American proposals are unpopular in France, but the great stumbling block must be the limitation of land forces. Here France

will feel that her security is vitally affected. Her home "Police Contingent" would be only about 96,000 against Germany's 141,000, and even if the 163,000 which would be allowed for the French Colonial Empire were included, few Frenchmen would accept this as redressing the balance. The total French land forces, exclusive of reserves, number at present, about 694,000; subtracting from this 259,000 for "Police Contigent", a "Defence Contingent" of 435,000 is left. This is to be reduced by one-third, leaving France and her Colonies with a total force both "Police" and "Defensive" of approximately 549,000 only. In other words France is asked to reduce her army by over 145,000 men, deprive herself of tanks, heavy artillery and bombing aircraft, while the German land forces may be increased by some 25,000. It is most improbable that any French Government, which accepted such drastic reductions, without compensating and adequate guarantees against Germany, would continue in power for a week. Already the French representatives at Geneva have stated that the Hoover proposals can only be considered in connection with their original suggestion of an International Force under League control. As most nations are agreed that this particular proposal is impracticable, it looks as if another deadlock will be reached.

The attitude of the British delegates towards Mr. Hoover's proposals is one of general approval tempered with some criticism. In place of a reduction in the total tonnage of capital ships they advocate a decrease in the size of individual ships, and go beyond the Americans in urging the total abolition of submarines. Newspaper reports give the impression that Great Britain is prepared to accept the abolition of heavy artillery, large tanks, and bombing aircraft, but it is unlikely that with its overseas internal security commitments a British Government would be prepared to give up all forms of tanks and air bombardment. As for land forces, if Great Britain is considered alone, the total British Army falls just short of the numbers allowed for the "Police Contingent"; if the whole Empire is considered as one unit, its total land forces are very much below the permitted "Police Contingent." This only demonstrated the plain fact that no portion of the British Army is anything but a "Police Contingent" and there should, therefore, be no question of quantative reduction.

The American proposals must also be considered from the peculiar standpoint of India—and India in this matter is very definitely in a completely different position from any other nation. To begin with there is no relation between the strength of her armed forces and those of any Great Power. Every European country, including Russia, and every member of the League of Nations outside Europe could disarm completely without it affecting in any way the strength of

India's defence forces. India's requirements are based on what is necessary only to defend her land frontiers from aggression by her immediate neighbours and to maintain internal security. According to Mr. Hoover's allowance the "Police Contingent" for India would reach the respectable total of 815,000 men. At present her total forces, including military police, irregulars and Indian States Forces, amount only to about 275,000 men so that India could increase her army by 540,000 men before she was considered to have any "Defence Contingent" at all. This astonishing figure brings out very clearly the smallness of the present Indian defence forces compared with those of other nations. Even were our small field army classed as a "Defence Contingent" and considered without any reference to its "Police" duties, there could be little argument for its reduction. States on India's borders are not members of the League, and he would be an optimist indeed who expected the Afghan tribesmen to join in the world fervour for disarmament to the extent of giving up a third of their rifles. Disarmament in India cannot be based on what is found possible or advisable in Europe—it must be considered separately on its own merits.

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The Irish Free State.

The personal negotiations between Mr. de Valera and British Cabinet Ministers, which at first raised hopes that a way out of the rather artificial difficulties between Southern Ireland and the rest of the Empire would be found, have broken down. They could hardly do otherwise when Mr. de Valera adopted so intransigent an attitude. He declared that his object was a Republican Ireland to include Ulster; that between this Republic and the British Commonwealth there might, in some circumstances and for some reasons, be some form of association; and that in this case the King should be recognized as the head of the association. Meanwhile, even before this happy state of affairs could be reached, the British Government must accept the abolition of the Oath of Allegiance and the withholding of the land annuities. From this position he has not retreated beyond stating that he is now prepared to accept the original British proposal for arbitration on the question of land annuities, but only subject to certain conditions of his own. These are that the personnel of the arbitration tribunal should not be restricted solely to citizens of the Empire and that other payments besides the annuities should be considered. Mr. Thomas, in the House of Commons, gave the only possible reply when he said that the Cabinet could not accept these conditions, and further that the Government would never consider the coercion of Ulster, nor could it enter into any agreements with a country which repudiated its solemnly accepted treaty obligations.

Southern Ireland is, therefore, faced with the choice of remaining in the Empire or leaving it. If she chooses to leave no force will be used to keep her in; but she cannot have it both ways, she must be either in or out, and if out, she becomes a foreign nation. There are signs that a great many people in the Free State are beginning to realize what this may mean to them, and it is by no means certain that Mr. de Valera will have a real majority of his countrymen behind him when it comes to following him into the wilderness. The Senate has considerably amended the 'Oath Bill' as passed by the Dail, and it seems that if he sticks to his guns he will be hard put to it to avoid another general election in the near future. He cannot be very confident as to its result. But he and his separationists backed by the intimidation of the "Republican Army," may carry the day so that it is by no means a mere academic exercise to estimate the effects on the Empire of a Free State secession.

The main implications of Southern Ireland becoming a foreign nation would be economic, military and political. As far as the Republic itself was concerned, it would become, as the *Times* describes it, "a small agricultural *cul-de-sac* in Western Europe." The foundation of its prosperity must remain agriculture, but its produce would be largely shut out of the best and nearest markets, Great Britain and Ulster, by the tariffs applied to foreign imports. British manufactures, which find at present a considerable market in the Free State, would similarly suffer, and the Republic might bargain for mutual preferences, but it would not be well placed either industrially commercially, or geographically to do so. It is safe to say that both countries would suffer economically from the threatened tariff war, but that the loss to the smaller would be incomparably the greater and might indeed be something not far short of ruin.

Militarily the Republic of itself would constitute little threat to the remaining United Kingdom—indeed it would be wise not to provoke its northern neighbour alone. Were the Empire at war with another foreign power, however, the position would be altered and Southern Ireland might become a serious menace. The loss of Irish harbours to the British Navy and still more their use as bases for hostile submarines, raiders or aircraft, to say nothing of the distraction of disturbances on the Ulster border, would cause considerable embarrassment. In addition food supplies to Great Britain from Southern Ireland would assume great importance in any war with a naval power.

It is for these reasons that, whether any part of Ireland is a Republic or not, the British Empire can never allow it in peace or war to be occupied or dominated by any great foreign power. When, if ever, the Irish Republic arrives, Great Britain will have to declare a very strong "Monroe Doctrine" concerning it.

The political aspects of separation, while they might prove tragic enough for thousands, are not without humour. Mr. de Valera has always relied on the overseas Irish at least as much as he has on the native population. All Southern Irishmen resident in the Empire would, if he had his way, become aliens, and as far as one can see, they would have little cause to thank him. The innumerable doctors qualified in the Free State who practice in Great Britain, the Civil Servants, the officers and officials of all kinds could no doubt preserve their livelihoods by taking out naturalization papers, but the large Irish labouring populations such as collect in Glasgow, Liverpool and other great cities of the Empire would be in an unfortunate position. With so many native unemployed in the United Kingdom there would be the strongest feeling against letting these foreigners become naturalized so that they could either take work from Englishmen and Scotchmen or draw the dole. Irish immigration into the United States has been drastically cut down of recent years; it is hardly likely that it would be permitted unrestricted into Great Britain.

The situation in India would be harrowing! The I. M. S. would be threatened with almost total extinction; the Police paralysed; the Veterinary Services would wither away; racing would collapse; there would be horrid gaps in the Army; the outlook would be gloomy indeed were we to lose the Southern Irish who now serve India. And if they all took out naturalization papers, it would never be quite the same. They could never pass as English, still less as Scotch—and they would not want to, why should they? Let us hope then for everybody's sake that Mr. de Valera will suddenly get a little common-sense, or, if that is too much to hope for, that his followers will.

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Languages and Efficiency.

The Indian Army as a whole is unquestionably a more efficient and more formidable fighting force than it has ever been in the past, yet in one respect, and a very serious one, most authorities are agreed that it falls below the pre-war standard.

That is in the British Officers' knowledge of their men's vernaculars. There are those who would have us believe that in the palmy days before 1914, all British Officers of the Indian Army spoke Urdu and a vernacular or two fluently, but the present generation of officers has seen too many of its seniors spluttering hopelessly in orderly rooms and on parade to believe that quite so high a standard prevailed. Nevertheless, most of them will admit, that in the old days not only was the average officer's power of expressing himself in Urdu greater than it is to-day, but a very much higher proportion could talk to their men in their own particular vernaculars. Not content with a working knowledge of Urdu, officers went on to learn at least one of the languages spoken by their sepoys amongst themselves and in their own homes—Pushto, Punjabi, Marathi, Nepali and the rest. Before the war every officer had to pass an obligatory test in the vernacular or most important vernacular of his unit, and many afterwards voluntarily took the Lower and Higher Standards of the language. During the war obligatory examinations naturally lapsed, and in the reorganization that followed only Urdu survived as a compulsory test—all other languages became optional. As a result, though most war and post-war officers have a smattering of their men's vernaculars, few have made any serious study of them, and in spite of the high monetary rewards offered for the Preliminary, and First and Second Class Interpretership Examinations in these languages, few candidates presented themselves for any except Pushto. There are six battalions of Mahrattas in the Indian Army, yet only one officer has presented himself for examination in Marathi during the past nine years ; there are several regiments of Gurkhas not one of whose officers has attempted to qualify in Nepali ; and the record of other classes is often not much better. Of course there are officers who speak languages well but have never bothered to pass examinations in them, yet it must be admitted that these are the exceptions and that, speaking generally, a lamentable neglect of the vernaculars prevails. Such neglect is definitely dangerous. It is difficult to know what a man really feels or thinks unless you speak his own language. The sepoy appreciates, more than is sometimes realized, the compliment the Sahib pays him when he strives to master his perhaps uncouth native tongue. The attempt is evidence of a real effort to understand him, a real desire to learn about his customs and beliefs, and it never goes unanswered. Knowledge of his language is the closest and strongest link in the

bonds between officer and sepoy. Without it there is always danger of misunderstanding; sometimes even of lack of confidence.

Why is it, then, that so many officers have since the war neglected Urdu and still more the other vernaculars? There are many reasons. Chief amongst them is the greatly increased amount of work the young officer is expected to do. In olden days when he had finished his parades and a modicum of office work, he was free to wander about the lines, chat to the men, study their languages; now he has three times as much to teach them on parade, twice as much office work, and on of top all this his own education—and it is this last which, however much we dislike to admit it, draws him away from his men and their languages. There is that T. E. W. T. for next Tuesday to be studied; the C. O.'s weekly discussion on a chapter of F. S. R. II that has to be prepared for; the Command or what-not essay that must be written; the entrance test for some small arms course that has to be mugged up; and, hanging like a pall over all, those never ending examinations, retention, promotion and Staff College. True these examinations at any rate were there before the war, but of recent years they have loomed much larger on the young officer's horizon. He simply has to pass the first two, he can take no risk of failure, for failure means he has lost his job. No wonder that he will spend no time on other studies until these are behind him. Then, rightly or wrongly, having survived two or three reductions, he expects more, and believes that only when he can write p. s. c. after his name will he be safe from future sweeps of the axe. So once more he shoves his legs under a desk and starts cramming. He would like nothing better than to see more of his men, speak more of their language, understand them better, but the principle of security cannot be disregarded.

A good deal to improve matters has been done in the last year or two by reintroducing for the compulsory Urdu examinations the old Higher and Lower Standards and—a most important innovation—allowing a choice of either Persian or Nagri script. Similar examinations have now replaced the Preliminary and Interpretership examinations in other Indian Army vernaculars and the War Office have agreed to give fifty bonus marks in the Staff College examination to any officer who has passed one of these within the previous five years. There has been a strong feeling in some quarters that qualification in at least one vernacular in addition to Urdu should

be made compulsory, but it has been decided for the present to give the new system a chance of producing larger numbers of officers who will study and qualify in their units' vernaculars. Many experienced Commanding Officers are now encouraging their young officers as soon as they have passed the Urdu Higher Standard to continue straight on with the study of the regimental vernacular. Allowing a subaltern two years with his Indian unit in which to pass in Urdu, another eighteen months or at the most two years should see him through the vernacular. He is then solidly grounded on the foundations for a useful regimental officer—a knowledge of his men's languages. Promotion, examinations, Staff College and the rest can, and should, come later. He will have plenty of time for them.

Lectures.

Arrangements have been made for the following lectures to be delivered in the Gaiety Theatre, Simla, commencing at 5-30 p.m. each day :—

Thursday, 14th July—

"A Head Hunters' Frontier". By Dr. J. H. Hutton, C.I.E., I.C.S.

Thursday, 21st July—

"The International Economic Crisis and the Gold Standard" By J. B. Taylor, Esq., I.C.S.

Thursday, 28th July—

"The Committee of Imperial Defence". By Lt.-Col. H. L. Ismay, C.B., D.S.O.

Thursday, 4th August—

"The Round Table Conference". By W. H. Lewis, Esq., C.I.E., I.C.S.

All members resident in Simla will be sent tickets for these lectures. Members resident in other stations who will be in Simla on any of the above dates are asked to inform the Secretary who will send them tickets.

MacGREGOR MEMORIAL MEDALS, 1932.

His Excellency the Commander-in-Chief and the Council of the United Service Institution of India have awarded the MacGregor Memorial Medals for 1932 to the following :—

(*i*) *Silver Medal for Officers, British or Indian*, Captain E. St. J. Birnie, Sam Browne's Cavalry (12th Frontier Force).

(*ii*) *Silver Medal with gratuity of Rs.* 100 *for Soldiers, British or Indian*, No. 4013 Rifleman Shib Singh Negi, (10th Bn. 18th Royal Garhwal Rifles.)

Short accounts of the work for which these medals have been awarded follow.

Captain E. St. J. Birnie.

Captain Birnie accompanied the Smythe Expedition as Transport Officer on its successful ascent of Mount Kamet in May and June 1931, and on the 23rd June climbed to the summit of Mount Kamet himself. Afterwards he went with Messrs. Smythe and Shifton to the Arwa Valley where a three weeks' exploration of the glaciers west of the Mana Valley was carried out, including the climbing of an untriangulated peak placed by aneroid at 21,000 feet. A pass across the range was established on 20th of July, and Captain Birnie accompanied by a porter made the first crossing into Tehri-Garhwal. He returned into British Garhwal by a second pass later in the day.

A few days later Captain Birnie with six porters made a five days' reconnaissance in Tehri-Garhwal establishing two more passes, and returning across the range by a third route south of the only triangulated peak, Satopanth II, in the area. All the routes established were over 20,000 feet in height, and a map of the area was made.

Captain Birnie ran a considerable risk when already tired from the previous ascents, in carrying on by himself with porters, exploring passes, and establishing routes. His reports gave valuable information to the Military Survey Department of India.

Rifleman Shib Singh Negi.

Rifleman Shib Singh Negi underwent considerable hardship and at times personal risk of life in obtaining maps and photographs of the ice barrier on the Shyok, in addition to further maps and photographs of military importance.

On the 6th July 1931, he was sent up to the Chong Kumdun to carry out the mapping of the ice barrier. He camped there for the night, and was joined by a British Officer next day.

On 8th July they and three Ladaki coolies attempted to climb the ice barrier and gain the lake on the far side, with the intention of ascertaining the difference in level between the lake and the ice barrier and, if possible, the depth of the lake. The barrier was climbed at a point immediately below its junction with the small side glacier. After proceeding about two hundred yards across the ice, the party came on a sheer drop of about forty feet. The Ladaki coolies could not proceed beyond this point, their local shoes (Paboss) would not grip and they had had to be dragged up by sheer force on the rope. This meant that the British Officer and Shib Singh Negi (both wearing crampons) would have to proceed alone, and should either have become a casualty in the badly crevassed surface neither would have got out. The ice barrier could be properly crossed with safety only by a party of four or more, all wearing crampons and at least two ropes. In the circumstances further attempts to cross the barrier had to be abandoned.

On 17th July, Rifleman Shib Singh Negi mapped the upper portion of the lake.

SIDE-LIGHTS ON SOVIET ORIENTAL POLICY.

By Captain G. E. Wheeler, 5th/7th Rajput Regiment.

A proper understanding of the position of the U.S.S.R. vis-á-vis the Middle East requires not only a knowledge of the conditions, so different from those of twenty years ago, prevailing in the Middle East to-day, but also a dispassionate view of the nature and working of the whole Soviet machine.

There are two main theories regarding the policy of Soviet Russia in the Middle East which may be briefly examined. The first of these is that the U.S.S.R. faithful to its ideal of World Revolution, aims at planting Communism in the different countries of the Middle East. To this end it " disseminates propaganda " and strives to promote discord among tribal elements with a view to embarrassing the existing regimé and thus paving the way for Revolution. All the U.S.S.R.'s commercial operations are considered to be part of this policy. They have been described as " economically unsound " and must therefore be continued from purely political motives. The second theory, which is of more recent origin, is that Communism is being used as a cloak for pursuing the old policy of aggrandizement ascribed to Imperialist Russia.

It will be the object of the present article to discuss these theories both in the light of recent events and also of certain publications of both Soviet and other origins. An attempt will be made to show that while the ambitious nature and far-reaching effects of Soviet designs have been greatly exaggerated, that very exaggeration has led to a neglect of certain basic features of Soviet Oriental policy. By attributing to the U.S.S.R. plans which are not in its own interest or only realizable in the dim future, an attitude of mind may be induced which will ignore the gradual progress of an influence of which the very nature is imperfectly understood. Such an attitude will be dangerous, especially from the point of view of the British Empire.

In such a short sketch as the present one it will not be possible to discuss either the Modern East or the Soviet machine at any great length. It will be necessary, however, to pass in review one or two of the outstanding points in these problems. The situation prevailing

in the Middle East from the end of the Great War until about 1925 has been admirably described by Mr. Toynbee in his Survey of International Affairs. Briefly, this situation was, that with the wane of Imperialist influence in Persia, Afghanistan, and Turkey, the U.S.S R. sought to set itself up as the patron and mentor of these countries. Many initial successes were scored such as treaties, trade agreements and concessions, but it gradually began to appear that the unexpected growth of Nationalism resulted in the presence of all foreigners being resented alike. The revolt of these countries against Imperialist influence, moreover, did not mean that they wished indefinitely to oppose the " Imperialist " nations. They wished rather to be received into the comity of civilized nations and to participate in their political and cultural advantages. Such advantages were by no means apparent under the Soviet regimé and for this reason Soviet advances began to become less and less welcome. The gradual realization of this situation resulted in a modification of Soviet Oriental policy which began to be felt as far back as 1926.

It cannot be too strongly stressed that during the whole of this post-war period, the instigators of Soviet Oriental policy were very far from being in accord with each other. Although Soviet protestations as to the non-official character of the Komintern cannot be accepted, it must be realized that the Komintern and the Narkomindel (People's Commissariate for Foreign Affairs) are frequently at loggerheads just as in the British Empire two government departments, such as the War and Foreign Offices, may be unable to agree on a matter of policy. This lack of team-work in the Soviet organization is well brought out by one Agabekov in his book of memoirs recently published in Berlin. He shows, moreover, that the inferior ability of Soviet representatives and the intrigue, suspicion and cupidity which were rife both in Moscow and abroad, militated most seriously against the even march of Soviet Eastern policy.

Now it must be understood that, up to 1926, there was serious justification for the belief that the U.S.S.R. aimed at the rapid planting of Communism in the Middle East and particularly in Persia where Soviet agents and clubs existed in most of the larger cities. Several small disturbances were unquestionably provoked by Soviet agents and the support of many important commercial and religious personalities had been, at least temporarily, secured. In Afghanistan, also,

the Komintern was seriously at work and was at any rate spending considerable funds in propagating Communism. In 1926, however, a change could be observed. Many Soviet representatives were removed and replaced by men of a quieter and less obviously proletarian stamp. Attempts were made to interest Persians in Soviet culture, methods of locust destruction, etc., and from that time forward real evidence of intensive propaganda or of attempts to promote discord is lacking. But in the minds of many of the inhabitants of the Middle East and of European residents and representatives, a habit of thought had been acquired, namely, that all disturbance was attributable to Soviet intrigue and that all or much of Soviet trade was bogus and "a cloak for more sinister activities." It was at this time that a Persian was heard to observe that the increase in earthquakes was undoubtedly due to Soviet influence.

In order to study the period from 1926 onwards, recourse may profitably be had to Agabekov's book of memoirs mentioned above. This book, which consists of the revelations of an agent of the Oriental Section of the *Ogpu* in the Middle East, has attracted attention principally on account of the descriptions which it contains of intelligence "coups" carried out by the author in Persia and elsewhere. These descriptions are sensational and have, moreover, an undeniable air of truth; but the real importance of the book lies in the insight which it gives into Soviet Oriental Policy. Perhaps the most striking impression which can be gained from these "Memoirs" is the fact that the U. S. S. R. was, at all events from 1926 to 1928, genuinely afraid of British "machinations." The British were sabotaging the Perso-Soviet Trade Agreement; the British were behind the activities of the Armenian Dashnak Society and of the White Russians; the British had engineered a mutiny in the Persian Army and a rising in Pusht-i-Kuh; they had "built a road from Iraq to Lake Urmia and (*mirabile dictu*) had organized a flotilla on the lake itself"; they had handed over the Sheikh of Mohammerah to the Shah in return for His Majesty's agreement to employ British advisers in the Army and purchase munitions in England.

It will be clear to anyone who has followed recent history in Persia that many of these extraordinary reports were probably originated, for obvious reasons, by the Persians; others were mere figments of the imagination. It is, however, impossible for anyone acquainted with

Soviet mentality and its attitude towards "intervention," not to realize that, in almost every case, these preposterous stories were genuinely believed by the majority of Russians. To illustrate this point it will be convenient to recount briefly an incident of which the present writer had first-hand knowledge and to which Agabekov obligingly supplies the sequel. In 1926, a mutiny headed by a Persian officer named Salar-i-Jang broke out near Bujnurd in Khorassan. This mutiny which was comparatively easily suppressed, at first appeared to assume alarming proportions. General Jan Muhammad Khan, who was commanding the Persian Eastern Division at Meshed, attributed the whole affair to Soviet intrigues. This, indeed, was the general impression formed except by the American Financial Adviser, who knew of the arrears into which the troops' pay had fallen and the acquisitive proclivities of certain Persian Officers, and by one or two others. Agabekov, who was in Moscow at the time, relates how the Soviet Consul-General in Meshed reported that the mutiny had been provoked by the British giving the names of "the British agents who were in touch with the leaders of the movement"! Later, but too late, it was discovered that the mutiny had "a revolutionary character" and might have been profitably supported. It was at this juncture that Apresov, the Soviet Consul-General in Meshed, was relieved by a man of greater ability and quieter and more conciliatory character and Agabekov himself went to work in Persia. There are grounds for assuming that a change in Soviet policy begins at this point.

It is of great interest to examine the instructions which Agabekov received. All his tribal work was for the purpose of preparing the ground "in the event of a collision with England." The Kurds were to be "prepared" on account of the strategic position which they would occupy "in the future conflict between England and Russia." The Bakhtiaris were to be prepared, "in the event of an attack by the Imperialist powers on the U.S.S.R.," to harass the British rear and destroy the Anglo-Persian oilfields. Agabekov's other duties were of a more ordinary nature; he was to improve the espionage organization and examine trade possibilities in certain specified directions. He was also to study the question of planting an espionage organization in India.

Agabekov was of course an agent of the *Ogpu* and not of the Komintern who might reasonably have been expected to deal with

questions of revolution and provocation. He shows, however, that the Communist Party of Iran was, in Meshed simply a pro-U.S.S.R. group, while in Tehran its ranks were filled with Persian police agents.

Some mention must be made of Agabekov's account of the flutter caused in Moscow by the Afghan rising in 1928 for it surely affords a most interesting study in national psychology. It is certain, however, that the U.S.S.R. firmly believed that Great Britain had engineered the rising and this conclusion was reached by the most tortuous reasoning imaginable. In spite of the excellent information at their disposal, they found that the British had decided to overthrow Amanullah as, " relying as he did on the Southern tribes of Afghanistan, he would inevitably have to assume an aggressive policy against India." This same reasoning moved the U. S. S. R. to resort to armed intervention in favour of Amanullah with disastrous results for its policy in Afghanistan.

A word must be said regarding Soviet Commercial activities. Recent experience of Soviet dumping in Europe has probably by now brought the question of Soviet trade in the Middle East into proper perspective, but, up to the end of 1930, it was stoutly asserted by many that Soviet trade in Persia, and particularly in the Persian Gulf, existed for the sole purpose of political propaganda. It may well be that this fatal but persistent misapprehension has played some part in the serious losses which the British and Indian piece-goods trade has sustained in the Persian Gulf of recent years. It was always believed that the Soviet trade venture in this region would " fizzle out " owing to the alleged impossibility of profitably selling goods at such low prices. The fact is however, that under a system of state controlled production such as exists in the U.S.S.R., it is difficult to lay down the law about profitable selling-prices, and it now seems likely that Soviet enterprise in the Persian Gulf has not only secured a new market for its produce but has in the meantime actually paid its own way.

With regard to the second theory mentioned above, that Soviet Oriental policy could be identified with the old policy, it can be asserted with considerable confidence that, in the present condition of the U.S.S.R., to follow such a policy would be ruinous not to say impossible. According to the best authorities, the U.S.S.R. has no wish whatever to involve itself in war for the present, for war would inevitably prejudice its vast economic plans. Now an active imperialist policy

presupposes a readiness to go to war. Moreover, as an attempt will shortly be made to show, war, as an active instrument of advancement in the East, has been discarded by the U.S.S.R. in favour of something much more dangerous and subtle.

It will be convenient at this stage to summarize the conclusions to illustrate which an attempt has so far been made :—

(*a*) The possible original designs of the U.S.S.R. in the Middle East were checked by the growth of Nationalism.

(*b*) Sporadic attempts to promote discord or overthrow existing regimés were, to a great extent, abandoned in 1926.

(*c*) Soviet policy in the Middle East has been, since 1926, largely defensive being actuated by an exaggerated fear of England. Espionage, however, has been developed and elaborated and the work of "*osveshchenie*" (throwing light upon) of social and economic conditions, sedulously pursued.

(*d*) Trade conducted on lines peculiar to the Soviet system has been pressed forward and has had some success.

(*e*) Inability and lack of desire to go to war militate against the possibility of the U. S. S. R. pursuing a policy of Imperialist aggrandizement.

Assuming the foregoing conclusions to be correct, it would, however, be the very greatest error to suppose that the U.S.S.R. has abandoned its idea of soveitizing and "emancipating" the East or that the profound and drastic alterations which are being made in the vast stretch of country between the Caspian and the Himalayas, will not, in time, produce an effect on the rest of the Middle East. In addition, it should be realized that the U. S. S. R. actuated as it is by a spirit of burning fanaticism, is firmly convinced that the Middle East needs and seeks emancipation from British rule and influence. Failure to grasp these facts connotes a fundamental inability to understand the potentiality of Russian influence in the Middle East.

At this juncture it may be asked why Russia, which has so often failed signally to appreciate the situation in Persia and Afghanistan and under whose rule millions of Moslems are reported to be groaning, should be likely to succeed in winning the sympathy and allegiance of Middle Eastern peoples. To answer this question it will be necessary to enquire into the present situation in Turkestan in order to get a general impression of the U. S. S. R.'s method of treating its own subjects.

In the absence of strictly impartial accounts of present day Turkestan, recourse must be had to publications of Soviet or quasi-Soviet origin. In her " Orient Sovietique ," Lydia Bach writes of the seven and-a-half million Soviet citizens in Soviet Central Asia that " what is done to them and what they do has a repercussion beyond the frontiers amongst their neighbours of the same race in Persia, in Afghanistan, in China and in India. The Soviet Government's Oriental policy is based on the policy of nationalities. According to the doctrine proclaimed by Lenin, the East, thanks to the support of the victorious proletariat and by means of the Soviet system, will attain directly to communism without passing through the capitalist phase. It is necessary to rouse its mentality, create a new culture which will, according to Stalin's formula, be 'national in form and proletarian in essence.' The social reconstruction in U.S.S.R. extends also to the eastern Soviet republics. There is a Five Years Plan for Central Asia. It envisages the economic survey and the industrialization of the country, the building of factories, of railways, of electric power stations, and the intensification of agricultural production, notably that of cotton which will tend to become the sole product of certain regions."

This then is the Soviet plan in Central Asia. The criticism will at once be made that the plan is only workable with the willing co-operation of the population whose culture is of too long a standing not to revolt against enforced innovations. It is just this error that prophets of the U. S. S. R.'s downfall have fallen into so many times during the past twelve years. Calvin Hoover in his admirable study of Soviet commerce has shown that force is the keynote of Soviet policy. He believes that without force a socialist regimé could not be inculcated. The Russian people have been forced into their present position; they are being forced to collectivize and industrialize the country, forced to change their mentality and forced to despise the past and glory in the present and future.

No serious student of affairs in " European " Russia who has based his studies on impartial authorities, can fail to be aware that, in spite of numerous obstacles and countless mistakes, impressive successes have been scored on the industrial, and, latterly, even on the agricultural " fronts." Collectivization, in spite of its unpopularity, has been applied and, according to the " Times," there is little doubt that it will increase the agricultural output of the U. S. S. R. beyond all

knowledge. The fact must be faced that if there is a strong likelihood of the success of Soviet economic planing in the West, the same likelihood exists in the East.

Apart from the book above quoted, another and more detailed account of Soviet work in Turkestan exists in " Kochevniki " (The Nomads) by N. Tikhonov. This is a well-written account of a journey carried out by a Soviet publicist in Turkestan who aims at acquainting the rest of the U. S. S. R. with the political and social condition of their Oriental comrades. Allowing for the fact that the book is certainly biassed and that many awkward facts are probably glossed over, it cannot be denied that it contains an extraordinarily graphic description of the people with whom the author came into contact. The accounts of collectivization at work among the Jamshedis, Baluchis and Turkomans may be highly coloured, but their extreme interest cannot be ignored, more especially as they are accompanied with telling criticism of existing Soviet methods. The remarks of the educated Turkoman who made comparisons, highly unfavourable to the former, between the Soviet workers in Turkmenistan and British officials in India, will come as a surprise to those who believe that self-criticism in the U. S. S. R. is non-existent.

The whole question of the stabilization of nomads through the medium of collectivization should and must be studied by anyone interested in the future of Central Asia, and if any measure of success results from the experiment, it must be expected that repercussions will be felt in Persia and Afghanistan. It must be regretted that " Kochevniki " is not a more serious and connected study, but the suggestiveness of these fragmentary sketches and impressions is nevertheless effective.

A digression must now be made to the subject of the scientific study of conditions in the countries of the Middle East which forms an important part of the Oriental policy of the U. S. S. R. It is here that the U. S. S. R. shows itself in a particularly enterprising and therefore dangerous light. While the rest of the world seems to regard the Middle East either as a repository for attractive antiques or as a plastic mould for the reception of Western civilization, the U. S. S. R. is trying to understand it as it really is. In this connection, a few words must be said of the Leningrad Oriental Institute which has already produced many works of an original character. These works contain much that will be distasteful to Western European orientalists

for they are confined almost exclusively to the Modern East and have little to do with ancient literature and language. The Institute has pointed out that its publications are not intended to have an international appeal, and this is insured by the fact all the grammars and dictionaries are in Russian. The general object of the Institute is to teach the most modern forms, not only of the many Tartar dialects spoken within the U. S. S. R., but also of Arabic, Persian, Turkish and the principal languages of India. The chrestomathies published by the Institute make a special point of selecting material likely to give information on or stimulate interest in the social and political conditions prevailing in the countries in question. The chrestomathy of modern Arabic is an extremely important work, not only from the language point of view, but for its bringing into prominence the literary work of Arabs, both men and women, in the field of politics and social reform. The very existence of such work must be unknown to many. The Persian and Urdu chrestomathies too, are surprisingly up-to-date and practical in their scope. The effect of such work may easily be that the Middle East is presented not as a vague world, shrouded in religious prejudice though coloured with romance and poetry, nor yet as an arena for foreign political, commercial and military prowess, but as a real world where real people are striving to tackle modern problems and expressing themselves in modern languages.

If the Soviet economic menace is a real one and of the nature indicated above, what is the remedy for it, or rather what is the prophylactic against it ? To expatiate on this theme is beyond the scope or ability of the present writer. It will be sufficient to say this : that most Englishmen are convinced that whatever success Communism may register in the U. S. S. R., it is not the proper unit of progress in the world as they know it. Military science holds that success in war consists in obtaining and maintaining the initiative. It also urges the importance of studying the weapons and methods of the enemy and adjusting one's own weapons and methods accordingly. Soviet influence in the East is of a nature more complicated and subtle than armed force and requiring even more skill and foresight to combat it. That influence is operated and aided by fanatical zeal, ruthless reconstruction, and painstaking and penetrating research. To fail to realize this situation and take intelligent steps to meet it, is to court danger.

SIGNAL SECURITY.

By Major R. T. O. Cary, M.B.E., Royal Corps of Signals.

The Signal Service of an army equipped with reasonably modern apparatus for the transmission of orders, reports, etc., is under two very definite obligations to the commander:—

(*a*) To provide for the accurate and speedy handling of its signal traffic,

(*b*) To guarantee that, as far as is humanly possible, the subject matter of its signal traffic shall, where necessary, be denied to the enemy, *i.e.*, a reasonable degree of signal security must be provided.

In considering the second of these obligations it will be simplest to discuss in turn each of the four main systems of military communication, Visual Signalling, Line Telegraphy, Line Telephony, and Wireless Telegraphy and Telephony.

Visual Signalling presents comparatively little difficulty to security methods. In mobile warfare messages sent by visual will be normally of only such local importance, the signaller will be so much on the move, and the difficulties of interception so great (except in the case of flags) that the correct handling of the apparatus at his disposal will grant to the operator the security he desires. In fact, a high standard of training and discipline amongst signallers generally in the use of visual methods will solve fully ninety per cent. of the problem.

In position warfare visual signalling is not, generally speaking, a suitable method to employ. During the Great War as soon as the opposing forces settled down to trench warfare, visual methods of signalling, with the exception of the daylight lamp, were almost completely dropped. The success of the lamp was due in no small measure to its adaptability to concealment. It could be operated from a distance, and with careful sighting, as for instance aligning the lamp on the distant station through a length of drain pipe, it was almost impossible for signals to be intercepted by an enemy station.

Line Telegraphy.—For line communication between two points A and B, two main methods, may be employed.

(*i*) Earth return circuits,

(*ii*) Metallic return circuits.

With the earth return one half of the circuit is an insulated wire or cable, and the other the earth itself; the complete circuit being from the instrument at " A " through the wire or cable to the instrument at " B ," and back through the earth to " A ," thus completing the electrical path.

With the metallic return the earth is not employed as a conductor, the return path being provided by a second wire. The latter system therefore, though admittedly more efficient, necessitates the use of twice the quantity of wire for any given distance—a serious consideration especially in mobile warfare.

When a current of electricity is said to flow through a circuit, the following effect, amongst others, is always present. Lines of force are thrown out from the centre of the wire, even though it is insulated, and spread away from it in the form of concentric circles, gradually diminishing in force the further they get away from the wire. If one were to throw a stone into a perfectly calm pond it would illustrate very clearly the effect produced by passing a current of electricity through a wire, the ever widening rings in the water corresponding to the lines of force emanating from the centre or core of the wire.

If we then produce a second circuit and place it within range of the lines of force emanating from the first circuit, the result will be what is known as an " induced current " in this second circuit, due to the lines of force of the first cutting it. Thus it is possible to pick up and record the signals sent out by one circuit in another, even though they may not be actually touching.

Most people, at some time or another, have experienced the annoying situation when the third, and generally unwanted, voice appears in an ordinary civilian telephone conversation. It is quite likely that they have been the victims of " induction ," and that certain telephone circuits have become mixed up without actually touching. In metallic circuits this effect is hardly noticeable unless cables run close to one another for considerable distances, and for all practicable purposes we may take a well laid and well maintained metallic circuit as safe.

With earth returns risk of the enemy's over-hearing is largely increased. The earth, though quite a good conductor for the passage of a current of electricity, does not confine it to a narrow and well

defined path as does an insulated cable. For example, in a telegraph circuit from "A" to "B" using an earth return, to complete the circuit the current has to pass either one way or the other through the earth. The majority will of course pass in a direct line from "A" to "B" or *vice versa*, but the remainder will radiate out through the earth in the form of "earth currents" in the same way, but to a far greater extent, than would the lines of force from a cable.

Now the fact of the earth being common to any two opposing forces simplifies the task of the listener-in. All he has to do is to employ sufficiently sensitive apparatus to pick up these earth currents and the trick is done. It is obvious that the closer the listener is to the opposing circuit the more effective will be his listening apparatus. Equally the more sensitive and up to date the apparatus employed the greater will be the distance from the cable line at which this form of listening-in can be employed. With the almost daily improvements in valves alone, the risk to signal security from earth currents has correspondingly increased, until at present the employment of ordinary telegraph methods with earth returns in forward areas is dangerous.

A safeguard would be an instrument that, while capable of transmitting and receiving Morse signals, would make it impossible for those signals to be intercepted without direct access to the line. Such an instrument has been designed. Briefly, it employs such a minute quantity of electrical current in the line circuit that the earth currents, though still present, are so reduced and controlled in their effect that, unless the line is actually cut and a similar instrument joined in the circuit, over-hearing is impossible. Even in the most forward areas the likelihood of an enemy agent, armed with a suitable instrument, being able to establish himself in such a position as to allow him uninterrupted use of the cable lines of the opposing force, is very remote.

Line Telephony presents a different problem. It can definitely be overheard on either earth or metallic circuits, though as in the case of telegraphy, to a far greater extent with earth returns than with metallic. At the present time there does not appear to be a telephone instrument which cannot be overheard. It has not yet been found possible to reduce and control the electrical currents used in telephony as can be done for telegraphy, and telephony with earth return circuits is, therefore, a real danger to signal security.

The danger can however be anticipated and minimised to a very great extent by care on the part of those using the telephone. The substitution of false names for units can be employed, and will go a long way towards making conversation unintelligible to the enemy, though it should be impressed on all concerned that in no circumstances can users of the telephone be too careful. During the Great War on several occasions a chance remark by a telephone operator gave the enemy listener-in the information he required. Such instances usually occurred when a combination of telegraphy and telephony were employed. A message might be transmitted by Morse signals with the safe form of instrument already described, but when the message was sent, the same cable line could be used for speech, which was *not safe.* An operator would frequently use the telephone to acknowledge the message sent by Morse, and in the normal course of events this gave little or nothing away. If however he was careless he would sometimes slip in a chatty remark, such as, "I got that message O. K. Cheerio, we're over the top to-night," thus notifying the enemy that an attack or a raid was contemplated. Of course such incidents were comparatively rare, but they illustrate the care which is necessary in using the telephone.

Wireless Telegraphy and Telephony are in a totally different category from the systems already described and it is in the employment of these means of communication that the greatest danger to signal security lies. Wireless has reached such a pitch of perfection today that it is undoubtedly the exception rather than the rule for communication by this means to break down, and this reliability increases rather than decreases the danger to security. It may be taken that any signals sent by wireless either by telegraph or speech are broadcast. The more reliable the set, the easier it is to intercept its signals.

Take first the telegraphy side of wireless. Every user of the ordinary civil telephone system is allotted a number, which, used in conjunction with the name of his town or district, identifies him as the possessor of a telephone and enables him to communicate with others similarly provided with identification numbers. To enable one wireless set to communicate with another, it is necessary to use a similar system. Every army wireless station must therefore be allotted a call which may be either a group of figures or letters, or both. By sending out a call to the station desired, followed by its own call, one

atation is able to get in touch with another, but, this communication is being broadcast and both friend and foe will know that A B C is calling D E F. It may be argued that such information by itself is not of much value to the enemy's intelligence service, and up to a certain point that is true. It is only when it is considered in relation to other factors that its real value to the enemy is apparent. By the use of direction finding apparatus the position of a wireless station may be more or less accurately determined. A B C calls D E F, and immediately the enemy's intelligence service intercepts these signals and locates the two stations. At the moment we will assume that the calls A B C, D E F mean little or nothing to the enemy intelligence. As traffic between these two stations proceeds however, the situation clears. The actual volume of traffic, even if the subject-matter is not understood, will enable the intelligence branch, in conjunction with the known position of the stations, to determine which is the higher and which is the lower formation to which the sets are presumably attached. An increase in the volume of traffic may indicate the movement of troops, or again, an attack. In a comparatively short time it will be possible to put together a fairly accurate 'order of battle' which will, of course, be checked by other means at the disposal of the intelligence service. Further, no wireless station specially serves one particular unit; it is rather in the position of a local post office, from which deliveries of messages to individuals and units must be made. This involves the use of "Addresses to" and "Addresses from" as a portion of any signal message to be sent. These addresses can be, and of course are, disguised by the use of code names in substitution for the real ones. These may be satisfactory for a limited period only, but it will not take the enemy intelligence long to realise that "Mutt" and "Jeff" are in reality 1st Brigade and 1st Division. It will therefore be necessary to change these false names at frequent intervals. This in itself involves a tremendous amount of organization and a very perfect system of distribution. All such names must be in possession of units at exactly the right moment and all units have to take them into use at the same time. Should distribution in any way fail chaos will ensue and may take days to put right. In the meantime communication by wireless may become hopelessly disorganized and therefore unreliable.

Secrecy can be preserved by the use of a suitable cipher, but this method has its disadvantages. Enciphering a message of any

length takes time and needs highly skilled personnel, while deciphering at the other end again adds to the length of time it takes to deliver a message. It will therefore frequently be found that it is not worth while to send a particular message by wireless, as the time taken in enciphering, transmitting, and deciphering, will delay it so long that it will not be of much practical value to the recipients. Unquestionably the necessity for cipher does restrict the use of wireless on many occasions. Even though by the use of cipher the meaning of the message is denied to the enemy, there are many other factors which may enable him to obtain valuable information. The use of an originator's number is a case in point. When the Brigade Major of a Brigade uses the letters B.M. and a number to identify a message, it may mean that he is in fact giving to the enemy the information that it is a message from a brigade to another unit. From his point of view the frequent change of his originator's number is likely to lead to confusion when a reference to a previous message has to be made, and provides yet another of the straws likely to break the camel's back, yet if he continues to use the same reference letters he is undoubtedly giving away information to the enemy.

It is not of course for the Signal Service to decide the relative importance of signal messages. This is entirely the responsibility of the originators, who, in the majority of cases, will be the staffs of the formations engaged in the operations. A very thorough understanding of the capabilities and limitations of wireless on the part of the staff is therefore necessary before "Signal Security", certainly as regards wireless, can be made really effective.

Should an originator consider that his message will be of little or no value to the enemy, then he can instruct the Signal Service to send it in clear by any system they like. On the other hand he may frank his message so that if it is sent by wireless it must be in code. This understanding on the part of the staff is an absolute necessity to the efficient working of such a system. A mistake in the franking of a message may mean all the difference between success and failure in an operation. Replies and references to previous messages sent should also be treated with great care. A doubtful point of identity revealed by the interception of a message may be completely cleared up by a reference to the reply to that message.

With wireless telephony the difficulties are of course magnified considerably. One force will possess experts in the language of the other, and even though the users of the wireless telephone exercise the greatest care to avoid using the real names of units, formations, etc., the very tone of their conversations may give away valuable information. A study of telephone conversations will soon enable a listener-in to determine who is giving orders and who is receiving them. The natural anxiety of a user of the phone under particularly trying conditions may also help the listener-in to a better understanding of the situation.

The question of volume of traffic has already been mentioned as a source of valuable information to the enemy. The regulation and control of such traffic will, of course, be an important contribution to wireless security. Well thought out and carefully manufactured false messages, sent by the less frequently used wireless stations, and at times mixed up with traffic on all sets in the area, may prove to be a source of great embarrassment to the enemy intelligence. If a code that is not too difficult to decipher is employed, an even greater confusion may be created in the minds of the opposition. This again requires very careful organization, as, if badly handled, it is likely to defeat its own ends.

This article has dealt only with the main difficulties of signal security. Visual signalling, line telegraphy and telephony can all be dealt with by the exercise of reasonable care. Wireless is undoubtedly the main problem and, in order to ensure a system of "Signal Security" capable of guarding against the dangers inherent in wireless communication, the following measures must be taken :—

(*a*) Wireless calls must bear no relation to the units served by any particular W/T station and they must be changed at frequent and irregular intervals.

(*b*) Addresses "To" and "From" must be suitably disguised by false or code names and changed frequently.

(*c*) The same procedure must be enforced with names of units, etc. appearing in the text of the message.

(*d*) Originator's numbers must bear no relation to the originator himself.

(*e*) Employment of cipher will in the majority of cases be necessary.

(*f*) The volume and direction of signal traffic must be controlled.

There is one school of thought which maintains that the measures necessary for a really efficient system of signal security are too complicated, cause too much delay, and throw too much of a strain on staff and signal service to make them worth while. Their contention is that the gain in speed and simplicity will more than outweigh any advantage the enemy may obtain from lack of secrecy. Whether this opinion is correct or not is a matter for argument, but it is one which every officer should consider. The true solution lies, probably like that of most war problems, in the nice balancing of security against simplicity and speed.

HINTS ON MAKING A *BANDOBAST* FOR A SHOOT IN THE CENTRAL PROVINCES.

By A Forest Officer.

Whenever I come across in remote spots young men, who generally have never had an opportunity of learning about the India outside cantonments, I fully realize how much more difficult things are for them in every way than for an official with local influence and plenty of subordinates to help him. However, my experience is that most men enjoy the novelty of the situation, and I am sure those who have tried would agree with me that no one, who is keen to get out in the jungle and can put up with roughing it, should be deterred by the difficulties of the *bandobast*. If two men go together I believe the problems that arise will be more a source of amusement than anything else. I recollect my feelings of puzzled embarrassment on meeting two subalterns of a British regiment in the jungle, who solicited my help as regards "*madchens*" and a "*charmer*". I realized just in time that it was "*machans*" and a "*chamar*" that they were after, and though my mind jumped to all the problems they must be facing with so meagre an equipment of Hindustani, I realized later that I never met two fellows who enjoyed themselves more. I shall assume that the reader is equally new to the country and wants information *ab initio*.

The shooting in Government Forest, the only forest areas where any control over shooting is exercised, is administered by the local forest officer on behalf of the Deputy Commissioner who is the head of the District. It is always wise if you visit the headquarters of the district before proceeding to your shoot to call not only on the Forest Officer, but also on the Deputy Commissioner and the District Superintendent of Police; their advice is sure to be helpful and you may get quite unexpected assistance, as nowhere are you likely to meet a finer tradition of helping the stranger at your gate.

The local forest officer is called the Divisional Forest Officer and it is to him you address your application for a Shooting Block. His Division is divided into about half a dozen Ranges of 100 to 200 square miles each, in charge of Range Officers who rank with Indian Officers

in the Indian Army. These Ranges contain two or three shooting Blocks ; some good but most of them indifferent. The first consideration is to find out the names of one or two good Blocks and the name of the Division, and the only way to do that is to keep your ears open and jot them down against the day you may require them. You can, of course, leave it to the Divisional Forest Officer, but there is always a demand for his best blocks, and if the choice is left to him he will naturally incline to give the most popular ones a rest.

The rules allow you to apply for a Shooting Permit for a Block up to three months in advance of the day you mean to enter it, and you will be wise to do so. Possibly you may be able to get two Blocks the cost of each being Rs. 25 per month, but if your leave is only a month I advise you to concentrate on one area and get to know it. March and April are the best months.

Don't expect game to abound in India as it does in the pictures of " Africa Speaks " ; wherever you go in the Central Provinces you will have to look for it, and you will find your powers of patience tested far more than you expect. Against my will I once gave an inferior Block at a moment's notice to two subalterns who had got their leave and nowhere to go. Ten days later I got a note, " You were quite right this Block isn't much good. As a matter of fact the only living animal we have seen is a pig, so we have decided to spend the rest of our leave in Mussoorie." Two days later, " I am awfully sorry I wrote you that note when we were feeling rather fed up. We have had a wonderful time since then. Yesterday I got a solitary bull bison in the morning, and in the evening I saw tracks of tiger and sat up over a live kill. I got three tigresses in five minutes and my friend got the fourth further down the *nullah.*" Again, I lay emphasis on patience. Tigers trek round in wide circles and there is always hope.

The permit issued to you will show you the number of sambhar, cheetal, barasingha and bison you may shoot, the address of the Range Officer and details about closed seasons. The numbers allotted are governed by the annual limit for the Block and by the length of your permit. You will never be given more than one bison and generally two of each of the others. Tigers, panthers, bear, nilgai and pig are unlimited, but that is because they are classed as " vermin " and not because they are so numerous, except in the case of pig. Always shoot pig, there is no question of their being ridden, they are a plague

to the crops and your best means, not only of testing your shooting and your rifle, but what is also important, of making friends with your hosts, the local junglies. A dead pig the first night in camp is a fine introduction and it has helped beginners more than they know. All concerned appreciate evidence that this strange Sahib, who cannot talk to them, can anyhow hit the mark and that his *bandook* can kill, because no one knows what circumstances may not arise before the uninvited guest takes his departure from the neighbourhood, and not everyone looks forward to being mixed up unarmed in other people's tiger beats. Kill all the bears you can and don't treat them with contempt. The villager has no more dangerous enemy.

When you are told the Block you want is available, send the fee by Money Order and make out a concise list of questions, leaving space for brief answers, *e.g.*, Railway Station, Post Office, Distance to Block, best centre, is there a Forest Rest House, may I ask the Range Officer to get me kills and send carts to the Station, can I take a car or hire a motor lorry ? Ask the Divisional Forest Officer to fill in the answers.

And here a word of warning. The Forest Officer's duty is confined to issuing a permit, providing a Forest Guard to watch your movements and keep him informed, and to running you in and finding you if you break either Forest laws or Game laws. Dismiss the illusion that Forest Officers are maintained by Government to run shoots for themselves and other people. Whatever the Forest Officer, or his Range Officer, or his Forest Guard do to help you is done of their own free will.

Help you will certainly want one way or another from all these individuals, and you are pretty certain to get it so long as you set about it the right way, *e.g.*, always offer a Range Officer a chair.

It is difficult to think of all the things you want to know, especially as I must be brief. Note the following :—

(*i*) *Maps.* Ask the numbers of the one inch sheets which cover the Block and order on a Money Order form from—The Map Record and Issue Office, 13, Wood Street, Calcutta, paper Rs. 1-8-0, linen-backed Rs. 2-4-0 per sheet.

(*ii*) *Weapons.*

(*a*) If you can afford it a D. B. H. V., 400 or 450, and a small bore magazine rifle for stalking—Rigby, Mannlicher or Springfield—is the best equipment you can have. The former is only really necessary for bison.

For tiger or panther you are just as well off with the old ·500 D. B. black powder rifle, using low pressure cordite cartridges, which are smokeless. This should cost about Rs. 150 compared with Rs. 750 for a H. V. rifle. Bullets for bison should be nickel-capped and pointed; for the soft skinned cats they should be hollow-nosed or copper-tubed so that they break up at once. There is always a danger with H. V. rifles that the bullet will pass straight through a tiger. You may not be able to tell if you have hit at all and it may be difficult to find any blood trail to help you. Remember with all game it is often the second shot which counts, so what you want is to knock the animal down with the first and be able to finish it of with the second shot, preferably without frightening the animal or giving away your position by having to click a magazine. You are more likely to do this with the old ·500 D. B. rifle than with any H. V. rifle. If you do use a H. V. rifle be sure to have soft-nosed or hollow bullets.

Whatever rifles you take, practice with them on the range first. Confidence in your weapon is half the battle and always carry your rifle yourself, otherwise you will miss your chance.

(*b*) 12 bore shot-gun with

(*i*) 50, 4's and 50, 6's for peafowl, jungle-fowl and green pigeon.

(*ii*) 20 lethal bullets. Try them on the range. I saw one gun give a bull at 100 yards.

(*iii*) 25 S. S. G's.

Increase your confidence by having more ammunition with you than you are likely to want.

I suggest following up a wounded panther with S. S. G's. in both barrels, and a wounded tiger with a lethal bullet in right barrel and S. S. G. in left barrel, especially if on foot and you can't locate the animal. If possible always have buffaloes or dogs ahead to distract the animal's attention from human beings. Buffaloes are no use in the heat of the day. Dogs can be invaluable and can generally be trusted to look after themselves.

(*iii*) *Expense.*—Rs. 500 a head per month should cover you, apart from travelling expenses. Take fifty rupees worth of annas and plenty of silver rupees. Notes and four anna bits are not popular in the jungle. Pay beaters

and villagers with your own hand—don't leave it to your orderly or soldier servant, he will regard aboriginals as monkeys quite unworthy of full pay. Ask the Range Officer the daily rate for labour and carts and pay it out yourself at once. Nothing serves to establish good relations more, and it accords with the tradition of the best men in the country. The friends you can make among these simple folk will be one of your pleasantest memories.

Kills (buffaloes) cost about Rs. 10 and you should ask the Range Officer to help you arrange. Two men are required for tying up and visiting each kill. The rope should be one a tiger can break.

All you can hope for in the way of supplies are a few eggs, chickens and milk. Take stores, vegetables, fruit, etc. If there is a Forest Rest House it will be furnished, but has no lamps, crockery or plate. See yourself that drinking water is boiled and guard against being bitten by mosquitoes as much as possible.

(*iv*) *Rewards.*—Tiger and panther Rs. 15. Wild dog and bear Rs. 5. Send a receipt to the Divisional Forest Officer, quoting details and he will arrange payment by Money Order from the Treasury to the address given. It is customary to give the amount to the man who is with you at the time.

(*v*) *Miscellaneous.*—Don't forget :—Mosquito nets, quinine, aspirin, chlorodyne, permanganate, bandages, etc., plaster, iodine pencil, mosquitol for sitting in *machan*, soda sparklet, alum for skins, skinning knives, water bottle, cough lozenges if you are liable to cough in a *machan*, torch and refills, whistle, kukri, crepe-soled boots (not shoes), spine pad, pigsticker topi, fishing rod, field glasses, camera and books.

Books of local interest recommended are :—

(*a*) Shikar Notes for Novices, by the Hon. James Best, I.F.S.

(*b*) The Animals of Central India, by A. A. Dunbar-Brander, O.B.E., I.F.S.

(*c*) The Highlands of Central India, by Forsythe.

(*d*) Seonee, by Sterndale,

PICKLES, A. D. C.

By "Mouse."

It is with the greatest diffidence that I approach the question of *aides-de-camp* at all. Although he follows the second oldest profession in the world, the A. D. C. has suffered the derision, the abuse and the envy of all the centuries and centurions. Wits have used him for their gibes. Humorists have caricatured him for their base ends. Novelists, dramatists and diarists have dragged him in by his shortest hairs to establish their *aplomb* with the *au fond* of the *haut monde*. He, poor devil, is the whipping-boy of society. Nobody treats him seriously; nobody loves him; nobody sympathises with him, and nobody has stood up for him—until I undertook to write this article. (In Australia he is called a "Gent's help"; but the Australians are low.)

The *genus* A. D. C. is neither so distinguished nor distinct that it deserves the exaggerated isolation which falls to its ordinary lot. By some historical mischance the idea has grown that an *aide-de-camp* is a hot-house bloom; it looks beautiful, it smells agreeably, it is nice to touch, it has been nurtured amid the most delicate and refined surroundings and—if exposed to the blasts of the outside world—it wilts. Nothing could be further from the truth. Most As. D. C. thrive on blasts. The job calls forth a soldier's greatest attributes; force of character, courage of a high degree, verve in dealing with subordinates and ladies, quickness of judgment in an emergency, leadership, organization, administration, decentralisation, tact in dealing with superiors and in getting your own way (think of the number of Generals who failed to persuade or cajole politicians during the Great War all for lack of training as junior officers), and a cheerful appearance in the midst of the most depressing circumstances. There has never been a perfect A. D. C. Such an one would combine the appearance of a rejuvenated Field-Marshal with the sex appeal of a film star, the originality of a Fortnum or Mason, the character of a Sir Galahad, the plausibility of a Colonel House, the charm of a Henry Wilson, the ability and tenacity of a Ford, and the versatility of a polo pony in a pagal gymkhana. A few As. D. C. have reached almost these heights, but two of the best just failed the attainment of perfection on their appointment as Commanders-in-Chief in India.

Personally I am rather sorry for *aides-de-camp*. When they appear officially they are in the limelight of pitiless publicity. If one of them loses his stirrup, his head or his temper, it is a matter for six months discussion and a lifetime of memory. This may appear to be an over-weighted statement, but I know a man in India who is still trying to live down an upside-down spur and he has told me in confidence that he owes his present obscurity to this ghastly aberration of his bearer. There is the unfortunate story also of the young gallant who kissed the wrong woman at the right moment and has spent his time ever since kicking his heels and himself in the backwater of a garrison town. As. D. C. have many opportunities certainly, but temptation and disillusion are their step-sisters.

Having written this long-felt want among *aides-de-camp* it is, therefore, with peculiar sadness that I conduct the reader to an historical aspect of A. D. C.-dom wherein the hero shows up in a sorry light; but the same reader will concede, I hope, the truth of the old saying that this exception proves my rule. By holding up "Pickles" to the horror of the multitude I do not wish to testify that all As. D. C. are of immaculate conception, but rather do I wish to show that even the most inefficient of the breed may conceal virtues which place him definitely upon a higher plane than the late Captain Scott Jervis, 106th Light Infantry.

Captain Jervis, A. D. C. to His Excellency Sir William Mansfield and Comptroller of the Commander-in-Chief's Household, was court martialled in Simla in 1866, and the proceedings form one of the most remarkable events which convulsed Simla society since the Mutiny. Jervis was apparently a popular young character with a quick temper, an easy-going nature, and an astonishing disregard for the ordinary rules of discipline and everyday courtesy. He was the defendant. The plaintiff was His Excellency the Commander-in-Chief, Sir William Mansfield, late Chief of the Staff in the Bombay Army where he had "served with much efficiency during the mutinies and thus carried great weight in all military affairs." If one hazarded a judgment of his character from reading between the lines of the court martial proceedings the result would be the figure of an irascible, foolish, badly advised old gentleman who allowed his better feelings to be overcome by his natural anger at finding that for several years he had nursed a viper in his bosom.

This famous court-martial assembled on 25th June 1866 and finished its work about nine weeks later—on 30th August. The President was a Brigadier-General and the Members were seven Colonels, four Lieutenant-Colonels and three Majors. The prisoner was arraigned on five charges which I will condense from their legal phraseology into more homely language :—

1*st Charge :* Scandalous behaviour, unbecoming the character of an officer and gentleman while employed as Aide-de-Camp, in that he—

(*a*) At Mahasoo during the months of September, October and November 1865, misappropriated property valued at Rs. 920-10-8 "for the entertainment of his own guests." The list of property included :

100 bottles of sherry.
61 bottles of champagne.
88 bottles of claret.
114 bottles of beer.
1 bottle of Worcester sauce.
1 tin of ham.
1 tin of pate de foie gras.
3 tins of truffles.
4 tins of asparagus.
1 lb. of tea.
1 bottle of mixed pickles.

(*b*) At Calcutta in February 1866 debited the sum of Rs. 700/- in His Excellency's accounts, the same sum being the cost of his own private table expenses.

(*c*) At Calcutta or Simla dishonestly misappropriated to his own use stable gear of the value of Rs. 275/-.

(*d*) Charged to His Excellency's debit the sum of Rs. 47-14-0 which sum was expended privately by Captain Jervis for his own use.

2*nd Charge :* Refusing to produce his account books before a Military Court of Enquiry on 14th May 1866.

3*rd Charge :* Neglecting to obey the order of His Excellency the Commander-in-Chief to attend a Committee of Audit on the 22nd May 1866.

4th Charge: Disobeying the lawful command of his superior officer (the Deputy Adjutant-General) to deliver him his sword when placed under arrest on 9th June 1866.

5th Charge: Conduct unbecoming the character of an officer in having at Simla on the 22nd June made use of highly insubordinate expressions in a letter to the Adjutant-General in regard to his appearance before a General Court-Martial:—"In reply, I have the honour most solemnly and emphatically to protest against this proceeding as unwarranted by law, principle or justice, and to state with every respect to His Excellency that nothing short of physical force will induce me to be present at the Court, and that if dragged there as a prisoner by violent means, I shall take no part in the proceedings."

Before this odious arraignment the prisoner adopted a defiant attitude. With the able assistance of a civilian counsel, M. W. Taylor, he made three pleas in bar of trial. Before these were accepted by the Court it had to close twice in order that it might discuss quietly the shockingly forcible language used by the accused. If one observes the chronological order of the five charges preferred against Pickles, one sees that he imagined from the beginning that he was being made the public and official delinquent for a personal and private spite, and that the injustice of such a proceeding turned his mind so violently "redwards" that he threw all caution, all discipline and all ordinary feelings of gratitude or respect, to the winds in order either to save his skin or vindicate his character.

In his pleas in bar he reiterated vehemently (*a*) that the Commander-in-Chief being in fact the plaintiff could not legally convene the court to try him; (*b*) that the orders he was charged with disobeying were illegal and (*c*) that the Commander-in-Chief had overridden the Judge Advocate in not allowing him, the accused, to call certain witnesses for the defence. To this the Judge Advocate made good legal answers which led to further judicial quibbling and counter-pleas—all too involved to follow—which resulted in the Court closing again. Eventually all the pleas were disallowed and the prisoner was asked to plead "Guilty or Not Guilty."

The prisoner replied: "Under protest—not guilty."

The Prosecution.—The case for the prosecution lasted for twenty-one days and was a long, tedious business brightened by passages at arms between the prisoner, the court and the various witnesses. Pickles was assisted by his civilian counsel whose arguments and

suggestions were so technical and abstruse that the court had to keep closing for days at a time to enable it to counter the various legal points raised. The first witness for the prosecution was His Excellency, Sir W. Mansfield. He produced an excellent memorandum written by himself for the guidance of his Personal Staff. Two extracts make quaint reading: " The Commander-in-Chief expects that his Personal Staff will not give in to the temptation of high play," and " Pique on the part of a member of the Staff towards their guests, cannot be permitted." In the evidence later produced it was found out that this latter order had been included for the special benefit of Captain Jervis, who on one occasion had been rude to the Quarter-master-General of the Bombay Army.

The " Pioneer " published the daily proceedings, and unpleasant excitement ran high through Northern India during the *six days* when the Commander-in-Chief had to submit to a merciless cross-examination. Jervis, prompted by his skilful counsel, plied his late master with embarrassing questions in an attempt to prove that the " misappropriation " was normal and had been practised by all members of the Staff for many years. He got the admission that the Commander-in-Chief himself had been his guest for four days during the period of the alleged consumption of the stores in Mahasoo. He insinuated that Lady Mansfield was at the bottom of the whole trouble. It all makes very distressing reading, and no one was more distressed than the Commander-in-Chief. He kept his temper admirably but on occasions was stung to make some acid answers. For instance: " The prisoner, although trusted in so many things was, I am happy to say, not trusted with my banker's book." (Here the prisoner rose and threw himself on the protection of the court). And again: " I consider that there is a suggestion of untruth running through both the letters which have been read by him in which he tries to make out that three officers of high rank on the Headquarters Staff of the Army were under my influence."

President: (who had evidently during the latter part of witness's answer been reflecting over the previous portion and who spoke with a dignity and deliberation which produced a profound impression upon the whole assembly) " Your Excellency, the prisoner has asked for the protection of the Court; it is the wish of the Court that Your Excellency should in giving evidence refrain from all expressions and remarks distressing to the prisoner....."

After the Commander-in-Chief's evidence there was a host of witnesses; the Military Secretary, an Aide-de-Camp (who, it was insinuated, had been expelled from a Masonic Lodge, black-balled at theBengal Club and assaulted in the Simla Club), a khansamah, Nunee Khan, a khitmatgar, Hussein Khan, the English butler, Abbey, a Chaprassi and finally the Deputy Adjutant-General of the Army.

The Defence.—The prisoner produced a defence which covers thirty-one foolscap pages of close print. On the first charge of misappropriation he pleads that no fraudulent intention was proved. He had merely *borrowed* the stores intending to pay them back later. He cited instances of the Commander-in-Chief lending stores to his Staff on previous occasions. He showed that the present action had been taken against him after Sir William Mansfield had held a private enquiry among the menial staff at which he, the accused, had not been present. In his indignation Jervis made some splendid oratorical flights: " For, gentlemen, while the evidence shows His Excellency exerting himself for the purpose of eliciting evidence against me, while it discloses members of His Excellency's Staff hunting for proofs, writing and telegraphing to Calcutta tradesmen with a view to the preparation of these charges, I myself have scrupulously avoided holding any, even the slightest communication with any soul, European or Native, from the first commencement of the controversy until now. I have met accusation with open and indignant denial, nay, I have given offence by the warmth, perhaps even the defiance, of my manner and language, rather than exhibit any desire to conciliate or conceal." He concludes his refutation of the first charge with the native admission: " I have, as I have before stated, *never made out the accounts at all.*"

The second charge, that of neglecting to obey an order to attend a Court of Inquiry, Jervis counters by producing a letter from the A. G.'s Department " requesting " him to attend. " How then my neglecting to comply with a " request " which I submit is synonymous with an " invitation " can be converted into the military offence of " neglecting to obey an *order* " I am unable to understand. I submit this point, Gentlemen, to your serious attention." He adopted a similar defence for the third charge and pointed out that at the time of the Audit Committee the whole case was under discussion. and therefore *sub judice*, between the Commander-in-Chief and his counsel.

Equally ingenious is his defence against the charge of disobeying the lawful command of his superior officer regarding handing over his sword when placed under arrest. The prosecution could produce no order or regulation to show that an officer should deliver up his sword. " The warrant for such a demand, it may be said is *custom*, but the prosecution has altogether failed to establish it, Colonel—himself having only been able to state in his evidence that he " thinks " such a custom exists. And he, Gentlemen, is the Deputy Adjutant-General of the Army." Pickles clinches his argument with a recent ruling (hearsay) made by the authorities of the Horse Guards that such a demand is unauthorised by law and " may with impunity be resisted."

The last charge, that of using highly insubordinate language in a letter to the Adjutant-General, the accused finds "extremely difficult to meet." He pleads that owing to his sense of deep anger and indignation at the whole proceedings which " if I may say so without disrespect were so unfair, so illegal and so ruinous to me that I might as well submit to *any* penalty as a stand such an ordeal ". In other words he preferred being hanged for a sheep than a lamb.

The prosecution replied for thirty-one pages, and on the whole appeared to demolish fairly successfully most of the accused's defence. New documents were produced to which the prisoner took legal objection and after much bitter argument was allowed eight days to make a rejoinder.

On Wednesday, 29th August, the Judge Advocate made his summing up, on the whole fairly impartial, but showing here and there a certain amount of bias against the prisoner.

Finding.—The Court found Jervis Not Guilty of the 1st and 2nd Charges, but Guilty of the 3rd, 4th and 5th Charges. He was sentenced to dismissal from the Service and " in consideration of the extenuating circumstances disclosed in the proceedings " the Court recommended him to mercy. The Commander-in-Chief ordered the Court to re-assemble on 12th September to re-consider its finding of acquittal. The Court adhered to its previous finding. The Judge Advocate was then ordered to prepare a general critical report of the whole case which he concludes with a valuable paragraph showing how a skilful civilian counsel had " made rings round " the Court. This led to useful corrections in the Army Act regarding the laws of evidence and legal procedure. The Commander-in-Chief confirmed the sentence

and in his remarks wrote that the finding of acquittal on the first and second charges was contrary to the clear and sufficient proof produced by the prosecution. He refused to countenance the recommendation for mercy and Captain Jervis was dismissed the Service.

I have it on good authority that Pickles returned to England, and appealed to His Royal Highness the Commander-in-Chief, who befriended him. Jervis was re-instated for one day in which he sold his commission for £1,800.

I am dashed if I can see where the moral of this story lies, except perhaps that it shows that for *Aides-de-Camp* it isn't all beer and pickles.

THE TRAVELS OF RISALDAR SHAHZAD MIR KHAN.

This is the first of a series of extracts translated from the autobiography of the Late Khan Bahadur Risaldar Shahzad Mir Khan, O.B.I. of the 11th K. E. O. Lancers (Probyn's Horse). An Urdu edition of the book under the title of "Shah Safar Sari-i-Dunya" has been issued to units of the Indian Army, but portions of it are, it is thought, of such general, and at times historical, interest as to justify publication in the Journal.

The author was the son of Rahmatullah Khan, a Lambardar of Pirpai in the Nowshera District of the North-West Frontier Province. He enlisted in Probyn's Horse on 14th February 1882 *and right up to his death at his home on 12th October* 1924 *he continued to render devoted service to his country.*

It must be remembered that Shahzad Mir Khan's descriptions of people and places are those of fifty years or so ago, and that he looked at both East and West through Oriental eyes. Times have changed and many of his strictures and comments might not now be justified, were perhaps not justified even at the time he made them. But they were made in good faith and by a trained and keen observer, while many of the more unusual of his personal experiences have been vouched for by independent witnesses.

Only a few copies of the original book in lithographed Urdu were published, and as in it names were spelt more or less phonetically it is difficult and sometimes impossible to identify them. In translation the author's turns of phrase have as far as possible been preserved, but, in deference to Western susceptibilities, it has been necessary at times to depart from his honest habit of calling a spade a spade.

It is hoped that these articles in the Journal will be some tribute to an Indian Officer of the best type.

INTRODUCTION.

I have written those things which I have seen and heard. All religions are treated equally in this book, and no one should cast religious aspersions at it.

The Reason for Writing this Book.

Several British Officers, and Indian friends of mine, who knew that I was a great traveller, have encouraged me, and even insisted that I should write a book telling of my adventures during my various

travels. This meant, of course, that I should write an autobiography. It was no easy matter to compile the book, as the events covered a period of twenty-seven years, but as I had kept careful notes of each journey in my field books, the task was not impossible.

Now the writing of books is the business of poets and their ilk, and so it will be unnecessary for me to say that all I have done is to write down in my own uncouth language what I have seen and heard. I have been fated to travel much in my time, and have experienced the ups and downs of fortune, and I record these paltry details merely as a memorial to myself in this world. Moreover, I do not think it right that I should keep sealed up in my heart the wonders that I have seen. I have never had any idea of making money out of selling books, or becoming a merchant. Indeed my intention was to have sixty or seventy copies of the book printed at my own expense, and to present them to my friends as souvenirs. Should any Sahib think that the book is not in good taste, and that I have written it with the sole object of self-aggrandisement, I ask him to be good enough to spare me from such criticism. In truth my only desire was that I should leave these memoirs of my adventures, and so complete my life.

Concerning Myself.

I was born in 1863. Without going into the details of my childhood, suffice it to say that I stayed at home till the 31st January 1882, when I started on my travels as you will see from what follows.

On the 1st February 1882 a boy friend of mine persuaded me to go off with him and see India. I was sure that my father and mother would highly disapprove of our scheme, so the initial difficulty was to find some way of obtaining the money necessary to put our plan into execution.

In accordance with the well known proverb, "All is fair when necessity presses," I went to a native banker, or '*sahukar*,' called Das Mull, a splendid fellow, with whom I used to deal, and told him that I wanted some money. He asked me what I was going to do with so much, and I told him that my brother, who had taken up a road repairing contract, wanted it to pay the coolies. He thereupon gave me the money, and I went home. That evening, in order to put my near and dear ones off the scent, I told them that I was thinking

of going over to Peshawar for a day or two, and asked them if I could do anything for them. Some of them gave me commissions to do, and the others thought nothing of it.

We started off that very night and next morning reached Khairabad. In those days the railway had not reached Peshawar, and I knew nothing of the world at all.

The only place I had heard of was Calcutta, so I asked the *Babu* at the Station to give me a ticket to Calcutta. He told me that I could not get a through ticket to Calcutta, and gave me a ticket to Lahore. There I took a ticket to Amritsar, where I remembered that there was a young man called Hikmat, of my village, who had enlisted as a sowar in the 11th Risala which was at that time in Umballa Cantonment. I thought that, as I had got so far, I might as well go and look him up. So I took tickets for us both to Umballa City, for in those days I knew nothing about Cantonments and such things!

We arrived at Umballa City at about 6 a.m., and went straight away to the Cantonments, and eventually found our way to the 8th Troop of the 11th Risala. I remember that it was a Sunday, but notwithstanding that, Colonel Prinsep Sahib Bahadur was going round the lines, and my companion and I were brought up before him. We were then sent to the Doctor Sahib for medical inspection! Well, I was passed fit, but my companion was not and I told them that I refused to serve without him. However, no one would listen to what I said, so what could I do? They sent my friend back to his home, and kept me. A few days later, the news reached my home that I had run away, and had enlisted in the Army. My brother was sent off post haste to the Regiment to bring me back. He turned up sure enough, but, the Risaldar Major, the late Muhammad Akram Khan Sahib, told him that it was impossible for me to go, and packed him off home again! For a few days I remained on as an '*umedwar*,' but on the 14th February 1882 I was enlisted, and so all the plans I had made to see the world and to make my fortune were dashed to the ground.

I now began to get a little sense in my head. I had been taught to read and write a little at home, and so I was able to start straight away learning Urdu in the Regimental School. In two years' time I had learnt quite a lot of Urdu, Persian, sums, and so on. It took me five months to pass out of riding school. I learned a little English, but

acquired a thorough knowledge of the Roman alphabet, which is used for signalling, and managed to pass top of the signalling class.

Personal effort is a good thing, and it was thanks to my hard work that I did pass first. Nevertheless I must own that my success was chiefly due to the instruction given me by my Commanding Officer, Colonel Boyle Sahib Bahadur. This Sahib treated the men as if they were his own children, and was an indefatigable worker. He was especially kind to me, and helped me in my work tremendously. It was he who made me efficient, and made a man of me. He praised me very highly in Durbar before everyone when I passed my signalling examination.

Two and a half years later, I was given leave home, and I saw my relations and dear ones again. On return from leave I got orders to go with a Commission, the details of which will be found in the account of my first journey.

This introduction was written on the 25th November 1909.

My First Journey.

The Herat Boundary Commission under General Lumsden, via *Multan, the Bolan, and the Quetta Valley,* 1885.

I do not know exactly how many men there were, but there must have been about two hundred of our Regiment, and two companies of the 20th Punjabis. We all assembled at Quetta, and moved off towards the Registan, or the sand desert of Baluchistan. Our first camp was at Chaman where we met the Afghan detachment under General Qazi Sad-ud-Din Khan, who was ready to help us in every way. Up to that time no troops had ever traversed the route by which we were going. In the whole of Afghanistan there was no sign of a road of any kind, and, as our way lay through heavy sand. The going was terribly difficult. If men strayed to the right or left of the track they were soon lost in a cloud of sand that was just like a stream of water. In order to cope with this difficulty we arranged with the local Baluchi nomads who graze their herds and flocks in these parts, to get fires lit on mounds by the side of the track. Thereafter, the smoke from these guided us by day, and the fire by night.

In camp everything was covered and buried in sand. Our cooking pots and other vessels were full of it. The water was dreadful. At one halt, to taste it by way of an experiment, I put half an ounce of

sugar into a small quantity of it, but even so it tasted as if I had put a half ounce of salt into it. Many a time we obtained our water on camels sent by the Amir of Kabul.

The Koh-i-Zal.

Zal was the father of Rustam, the famous hero, and in this country there is a mountain called after him. About nine miles to the north-east of the mountain is a large pond on the north side of which there is a stone fort, encircled with broken down wall. It is said that in this fort was the throne of Rustam.

I would very much like to know what the kingdom of these "Hero Kings" consisted of in this desert. No one lives here, there is no sign of cultivation whatsoever, and the wind that blows makes one's ears bleed. The only people we saw from Chaman to the Helmand were wild Baluch shepherds and cattle drivers. Every now and again, they brought for sale melons, wrapped up in leather, which were very sweet. There was good water in the Helmand, and when we reached Herat we saw a lot of vineyards. Herat is a fine city surrounded by a moat. The inhabitants, however, are just like Indians: that is they have soft tongues and flabby bodies. They were very afraid of us soldiers, and the shop-keepers would run away from their shops to the hills at night: the only discomfort, though needless, which our presence caused them.

The Commission waited for about a year in the hope of meeting the Russian Mission, and of settling the frontier between Russia and Afghanistan. The Russians, however, did not turn up. Eventually General Lumsden, in despair, returned to England, and the command devolved on Colonel Ridgeway Sahib. Half the escort, both Cavalry and Infantry, returned to India. The first winter we spent under canvas in Bala Murghab, and the second at Charshamba, where the Shrine of the 'Ashab-i-Kahf' is located. The whole story of these people will be found in the fifteenth Chapter of the Holy Qur-án.

The Ashab-i-Kahf.

There is a cave in a hillock near Charshamba, the entrance to which faces the east. A man can walk in without bending his head. The path inside the cave winds about till a wall is reached. Against this wall is a ladder about four feet high. On climbing the ladder, in a cavern can be seen the recumbent forms of three men, covered over

by a sheet; the bodies are moulded in clay and are quite recognizable. At their feet, on the face of the rock, has been carved the figure of a deer, and beyond that a greyhound, and beyond that again a hawk. About twenty-five paces to the east of the entrance to the cave is a round grave, on which there is a large grave stone. The story of the Ashab-i-Kahf is well known so I will only give a brief summary of it.

Oqianus was a shepherd who used to graze his flock on the slopes of the hill of Charshamba. One day he discovered a gold mine. By degrees he collected a number of servants and retainers, and made himself a king. He gave out that the hill had become gold, and that henceforth all men should bow down and worship him and his idols. Then two of the Ashab-i-Kahf, who were relations of Oqianus, refused to obey this edict, and said that man should bow down to God alone.

Oqianus gave orders that the Ashab-i-Kahf should be arrested and executed. In terror of their lives, they started off that night, and at dawn met a shepherd, to whom they told their story, and asked if there was any place in which they could hide as they feared that the King's horsemen must be very close. The shepherd showed them this cave, and went in with them. His dog tried to follow him but they would not let it go in. However, it insisted on following them, so they cut off its legs, and killed it, and buried it just outside the cave in the grave to which I have referred. This was the dog which is spoken of by Shaikh Sadi (on whom be peace). All three of them then lay down and went to sleep. At last when they woke up, one of them went off to the bazaar, and paid for his purchases with coins of the time of Oqianus. The shop-keeper informed him that Oqianus had been dead for 309 years, and that another King was then reigning. People asked him if he had found the treasure of Oqianus. He was then taken before the King, to whom he told the whole story. The King ordered two of his courtiers to investigate the matter. Off they went, but for many days did not return and all hope of them was given up. So the King, accompanied by his Wazir, went out to find out for himself what had happened. They pretended, however, that they were going hunting. From the models of the hawk, deer, and hound, which I have described, it would appear that they found the cave. There are many variations of this story, and the numbers of the sleepers given vary from seven to three.

Whilst in Afghanistan most of my time was taken up in signalling and survey work. When General Ridgeway was sent to Persia, I volunteered to go with him, and was fortunate enough to be selected.

In Persia.

One day when I was walking through the bazaars of Meshed, I gave a baker three pice, and asked for some bread. He gave me three flaps of bread, each of which was about one foot broad and two long. I told him that I only wanted three pice worth of bread and asked him why he had given me so much. He replied that he had only given me what was due to me. I took one of the flaps and gave him back the other two. On another occasion I bought a pice worth of grapes, and was given about a pound of them. In those days everything was wonderfully cheap, especially cloth and silk. The Persians keep their houses scrupulously clean. In Meshed is the Shrine of the Eighth Imam, Imam Reza, who died from taking poison. The dome is covered with gold tiles, and a priceless turquoise is suspended from the roof. I fancy that this must be the most beautiful shrine in the whole world. In Meshed, prisoners are released every year in the month of Muharram. The best turquoises, cloth, and silk in the whole world are sold in the bazaar, a part of which belongs to the Shrine.

Immorality in Persia.

During the course of an evening stroll through the bazaars, one will be asked right and left if one wishes to arrange a *sigha* or temporary marriage. The natural answer is, " Yes, for everyone must marry !" Whereupon it will be asked if such a marriage is to last for an hour, a night, or a year. Such marriages are obviously illegal, and so all the women in Meshed are prostitutes ; which, indeed, is the case throughout Persia. Moreover, should a Persian woman do any small thing to annoy her husband, he always has three stones up his sleeve to throw at her ; that is to say, the words "*talaq, talaq, talaq,*"—the threefold divorce. Thus all the women are without husbands, and so become prostitutes. The beauty of Persian women compares favourably with that of any women in the world, and you can ' marry ' as many as you please in Persia, but they will not leave their own country. No woman is treated with any respect, for even if the wife of an important official be seen going for a drive in a carriage, the soldiery and other passers by will call out to her " Hullo, old strumpet ! "

Barbers are freely enlisted in the forces of the Shah, and it is quite a common sight to see a sentry on guard, with his rifle leaning up against the wall, busy shaving a client. The troops seem to be always on guard, which duty they will gladly undertake for an indefinite period for a few pice. The men are very strong, but, like the Chinese, are a drunken, besotten lot of hermaphrodites. They drink all day long, and all night as well.

The Shah is very easy-going, and has not much authority. The British, and Russians have their Trade Agencies everywhere; the Russians especially in the north, and the British in the south.

The Affair of Panj Deh.

On our return from Persia we received the Russian demands regarding the frontier, which were to the effect that whether the Amir liked it or not, the village of Panj Deh was to be included in their territory. The Russian commander then wrote a letter to the Afghan Officer commanding the garrison in Panj Deh, telling him that he intended to occupy Panj Deh at 10 o'clock the next morning, and advised him to evacuate the village forthwith if he wished to avoid open hostilities. He added that the Russian Government had decided on this course of action as the Afghans were friendly to the British, and because Panj Deh was a Turkoman village, and all the Turkomans were Russian subjects. The Afghan Commander of Panj Deh replied that, as the Amir happened to be in India at the moment, he could not evacuate the village without orders and he was prepared to take the consequences.

Prior to this the Russians had got their infantry into an entrenched position in the snow at some distance from the village. At 10 a.m. on the next day some Russian cavalry were to be seen approaching Panj Deh. The Afghan infantry and cavalry deployed, and, a long way in rear, the Kabuli levies made a great to-do. When within striking distance of the Russian cavalry, the Afghan cavalry charged. It appeared that the Russian cavalry were immediately thrown into confusion, for their troops wheeled outwards and fled right and left. The Afghan cavalry careered on, and ere long came under very heavy fire from the positions occupied by the Russian infantry in rear. The Afghan force was thrown into confusion and was decisively defeated. They suffered very heavy casualties, which included a Colonel killed.

Some of our fellows had managed to attach themselves to the Amir's troops, and had a great time. Dafadar Qutab-ud-Din of the 11th only just managed to get away with the British flag! Our Mission retired to Charshamba in a blinding snowstorm, and the Regiment only just managed to get over the pass. I was with the rear guard. The whole baggage train, including the officers' kits, went astray and was looted. About forty of the hired transport mules died from the cold, and a number of our own camels and mules also perished. Many of our followers, including the armourer, died and the whole party suffered terribly. I personally had my foot frost-bitten.

Our men pitched their tents in the snow, though no one would have believed it possible, and gave shelter to those who were unable to proceed. God reward them for their bravery! Eventually we reached Herat, the place where they call a chittank a maund. From here as I have related above half the party returned to India, and General Lumsden went home to England.

This fight at Panj Deh suited the British well, as before that, for twelve years, the Amir had been practically a pensioner of the Russians, and lived either in Bokhara or Samarkand. The British had established him on the throne at Kabul, and the action at Panj Deh had definitely made him an ally of the British. A year later the Russians announced that they were ready to settle the frontier question!

The Russian Troops.

Political pourparlers continued, and at last we received orders to meet the Russian Mission, which consisted of about a troop of cavalry and a company of infantry, and was located at Zulfiqar. Their Company Commander was a Muhammadan, whose name I have forgotten. In the Russian Army they promote Native Officers to high ranks. They said that there was a Turkoman General called Muhammad Ali with the escort, but I never actually saw him.

The Cossacks appear to be well-built and strong, and they wear hats just like those worn by Indian Christians in Railway stations in India. The Infantry wear long boots of soft Bulgarian leather, and coats down to their knees of some waterproof material. Their rifles are similar to the single-loader Lee-Metford. The Cavalry have stars on the front of their caps, and wear long coats, red leather breeches, and long Russian leather boots. They are armed with the same rifle as the Infantry and long swords with handles like that of a reaping hook. Their horses are nothing more than strong, sturdy, fat little

ponies. On the saddle they carry a sort of pad, which is kept in place by the surcingle. When a sowar wants to rest, he takes it off, and puts it under his head, the rest of the saddle being left on the horse. Their bridles are like our watering bits, and they have a drinking cup fixed to one of their stirrups. Their feeding arrangements are very simple. When they get into camp, they slaughter, and cut up a sheep. These joints are thrown into a large cauldron and boiled. Next day the cauldron is carried along on a camel. Each man has a tin bowl, which he dips into the cold greasy broth, and into this he throws pieces of cold and stale bread. This is all they get. There are no servants for the Officers or anyone else, and they have no ' followers ' of any kind. The Officers' and mens' food is all cooked by the men themselves. ' Guides ' are the only non-combatants in their formations.

Their Officers get very little pay. They all have beards, and are very clever at intelligence work. The men are conscripts, and have to do six years with the colours after which they can extend if they wish. They are all under-fed, and a portion of the little pay they are entitled to is usually appropriated by their Officers.

When the men are on guard, they have to find their own accommodation for the night. So they will force their way into anybody's house. I will not shock you by describing the dreadful things they do in other peoples houses. Once, when I was with the Pamir's Commission, a Muhammadan killed a Russian soldier who had assaulted the women in his house, but the unfortunate man had all his goods and chattels confiscated. The Russians are very friendly and hospitable, and a guest's health will be drunk two or three times, he being made to drink wine with his host whether he likes it or not.

Should an Officer get annoyed with a subordinate, he will merely order two of his men to knock him down, and to beat him as hard and as long as they like. I myself saw a Dufadar treated in this manner by a Captain when I was in the Pamirs. When a Russian soldier addresses an officer, he has to keep his hand at the salute the whole time that he is talking to him. Russia is a hard country. Every day the Cossacks break the ice on the frozen rivers, and wash their horses all over. We used to keep putties on our horses legs all day and night, and yet they would paw the ground all night, and suffer much from the cold. The Russian horses did not feel the cold at all.

Delineating the Frontier.

At last we started to delineate the frontier in co-operation with the Russians, starting from Zulfiqar. All Turkoman settlements and lands were ceded to Russia. We surveyed the whole line from Zulfiqar up to the Oxus, or rather the Hamun, as far as Chah-i-Gulfam.

The Oxus is crossed by a ferry pulled by horses. The river is very broad and when the boats are half way across the horses are nearly exhausted and one can hear them snorting, and puffing, and blowing from a long way off. It is the custom to let the foals follow their mothers. On the Oxus is Kelif, the Port for Balkh and Bokhara. Here too the boats are pulled across the river by horses. North of the river at this place there is a hill which is covered with trees, to the branches of which flags have been tied. Exactly opposite, on the southern bank is another hill on which similar flags have been erected. I climbed up this latter hill, which is called Mujawir. Here I saw a great big stone on the surface of which were some faint indentations. I asked what was the signification of the flags and of this stone with its indentations. They told me that when the Imam Ali was on his way to Afghanistan from Shahr-i-Sabz, some of the people of Shadian had set out to kill him. He, however, to escape them, jumped his horse, Duldul, right across the river from one hill to the other, and the horse landed with three feet on this stone and the fourth sank into the ground, and made the hill subside a little. One can see the hoof marks quite clearly. God alone knows the truth of this story, for the jump he is supposed to have made from one hill to the other was about a mile wide. It is beyond all human comprehension. However, everything is easy in the sight of God!

They told me that it is the big stone that is called Mujawir, for it is where the Imam Ali sat and rested.

The Oxus, at this point flows very quietly, though people say that in its course it can be heard to murmur, "Hazrat Ali has frightened me with his sword Zulfiqar!"

Most of the Turkomans are nomads and own large flocks and herds. The men wear long coats, long boots, and fur caps. Their women wear turbans on their heads, and long coats, which they fasten round their waists with a *kamarband*. On their feet they wear red leather shoes with broad toe-caps. They have flat noses, and their faces are wan and drawn; they are slipshod, untidy, and unattractive, and are of no use. The staple food of these people is milk and meat.

The stage beyond Kelif is Takhta Pul, and the one beyond that Balkh, which is a very ancient city. Here there are many gardens, but few inhabitants. The few people who live there are nearly all Jews. The people of Balkh, and the glory of the city have departed to Mazar-i-Sharif.

Mazar-i-Sharif.

This is a new city full of lovely gardens, one march to the east of Balkh. It is the Headquarters of the Governor of the Province of Afghan Turkistan. When I was there the Governor was one, Muhammad Ishaq Khan, who had made himself very unpopular with the Amir. The latter had ordered his recall for some time past, but Muhammad Ishaq fearing that the Amir would arrest him, had disobeyed the summons. I heard that eventually the Amir made him an outlaw. Muhammad Ishaq then collected a gang of ruffians and fought the Amir's troops well and hard, but was at last forced to take refuge in Russian territory.

The city is called 'Mazar-i-Sharif' or the 'Noble Shrine' because it is built round the mausoleum of Hazrat Ali Sahib (the son-in-law of the Prophet Muhammad). It is said that no one knows the exact spot where his grave is; but it is written in a book which is kept in the Shrine, that Hazrat Ali, before he died left instructions that his body was not to be buried. So when he passed away, they put his body into a coffin, which they tied on a camel and then drove the camel out into the desert. No one knows what happened to the camel, but in the book it is written that, one night Hazrat Ali appeared in a dream to two hundred pious Muhammadans of Balkh, and told them where his coffin was to be found. He ordered them to inform the King, and tell him to build a great dome over his resting place. These good people went off and told the King of the vision they had seen. The King's Wazir ridiculed the whole story, and so the King would have none of it. A few days later the Wazir was stricken down with some illness, and was sick nigh unto death. After a while those good people again saw the vision in their dreams, and again informed the King of what they had seen. This time the Wazir helped them and persuaded the King to have the dome and the surrounding courtyard built. This is the Shrine that one sees to-day, which is called the '*sakhi*' or 'generous' shrine. The coffin is ten feet long, and is surrounded by a railing four feet high. They say that Ali was fourteen feet tall; but God alone knows the truth!

Many cripples, the halt and the maimed are said to have been cured at this Shrine; and so its precincts are always thronged with the sick and poor.

About six miles to the south of Mazar-i-Sharif, and about twelve miles from the hill of Shadian, there is a fort on the top of a hill. In the days when Hazrat Ali was in the country, it was inhabited by infidels. A watercourse, which is used as a road, leads up to it; and along the side of this there are still the remains of a wall. The building itself is still in perfect condition, except for the doors, and it is just the same as it was in those days.

They say that Hazrat Ali, who on one occasion wanted to spend the night there, broke down the doors, and went in. The infidels, who were living there rushed at him, and he only just managed to get out of the door and escape. He then mounted his horse Duldul and galloped up a very steep hill which was as slippery as glass. At the top of the hill he found a vine from which he ate some fruit. I never actually saw it myself, but I saw the marks of his horse's hoofs on the hill-side; and I was told that the vine still exists.

We return to India.

We stayed for a long time in Shadian for the reason that after a long stay in a cold country it is not wise to go to India in the middle of the hot weather. We spent the summer therefore in Shadian and returned to India at the beginning of the winter. On our way back from Turkistan, we came to a village on the northern slopes of the Hindu Kush. In all the countries I have ever been to I have never seen such a lovely village. It is called "Taj Kurghan," and certainly it is "The Crown Fort." It consists of a small bazaar, on both sides of which are shops. For some distance before you get to the bazaar you pass under an arcade of vines with their branches interwoven and clusters of grapes hanging down in profusion. The shops themselves, and indeed, the whole bazaar is covered and roofed in with vines which shade it from the sun.

Beyond the village there is a hill which is of a reddish colour on the slopes of which there is not a vestige of vegetation of any kind. I was told that this is attributed to the curse of Imam Ali, who during a battle in these parts, demanded his horse, and was told that it was out grazing on this hill. Imam Ali thereupon cursed the hill and the grass on it, after which the hill dried up and has been barren ever since.

When we arrived in Kabul we attended a Durbar, putting on the best uniform we had and turning out as smartly as we could in the circumstances. The Amir started off by saying that he blamed us, the British, entirely for everything that had happened; for having lost Panj Deh to the Russians, and for the casualties that his troops had suffered. "You obviously have connived at it all," he said, "or, at any rate, you must have known that it was going to happen—I am furious about it—You surely should have let me know about it!"

The Amir then continued in Persian :—" If only you had let me know, I would either have settled the matter with the Russians by peaceful negotiation, or would have forced them to accept our wishes at the point of the sword. So you see, all that has happened is thanks to you."

He then told us the following story :—

" Once upon a time the King Akbar was walking through the bazaars with Mulla Dopiaza and his Wazir Birbal, when a prostitute detached herself from the crowd in front of them, and with a wanton gesture embraced the Mulla Dopiaza. The latter at once turned and imitating her action, embraced the King in like manner. The King naturally was furious, and asked him what the Devil he was doing. ' I'm sorry,' said Dopiaza, ' but I thought that such behaviour must be some new form of etiquette which Your Majesty had approved of, for without Your Majesty's permission, she would never have dared to do such a thing."

" The cases are analogous," said the Amir " It was you British who started all this political whoring and caused all the trouble."

We were very disappointed that this was all the reward the Amir had to give us for two and a half years' hard work. We were too afraid to sleep that night. Everyone said that no one had ever been known to have returned safe and sound from Kabul.

However we were given a good breakfast next morning, and a band was sent to play to us. We were also plied with a surfeit of sweets and fruit, and were saluted right and left by the Afghan troops. These latter, in those days were not all dressed in uniform, moreover some were armed, but others merely carried sticks on their shoulders.

The best troops we saw in 1887 were the Turkoman cavalry, but now, I believe, they are all good. When, on our return from the

Herat Boundary Commission we emerged from the Khyber Pass, we found the troops of the Peshawar garrison lining both sides of the road from Jamrud to Peshawar. We were given a very good time in Peshawar, and were feted everywhere.

We then went by train to Lahore, where we camped near Anarkali. Here an English Prince and the Viceroy of India inspected us and then we were all given eight months' leave.

In 1888, when I came back from leave I rejoined the Regiment at Nowgong Cantonment where I was put in charge of the Signallers.

To be continued.

STONEWALL JACKSON—THEN AND NOW.

By Captain R. N. Gale, M.C., The Duke of Cornwall's Light Infantry.

The Question.

Between the 22nd March and the 25th June 1862, Stonewall Jackson with a force roughly equivalent to the modern division covered 676 miles in 48 marching days : during this period at least five battles were fought. The romance and the glamour, quite apart from the military achievements, of the Valley Campaign have made it probably one of the widest read of military actions. There can, of course, be little doubt but that much of its attraction is attributable to the biographer of General Jackson. The telling way in which Colonel Henderson has woven the life story of the West Point graduate into his account of the exploits of the Confederates in Virginia, leaves one, in so far as the military aspect is concerned, with the impression of distinct bias. Granting all this, however, the actual facts must remain. Kernstown and the retreat to Elk Run ; the move to Stanton and the battle of McDowell ; the advance up the Lauray Fork resulting in the discomfiture and retreat of Banks over the Potomac ; the miraculous escape of the Valley Army from the position in which it found itself after this exploit ; and, finally, the battles of Crosskeys and Port Republic, are all military achievements which need the embellishment of no biographer to add to their lustre.

With the advantages that modern inventions would have given to the Federals, the student of military history is apt to wonder very much whether, given present day means of reconnaissance, communications and staffs, Stonewall Jackson could have achieved the strategical and tactical successes for which his campaign is so famed.

The Human Factor.

In considering their actions commanders, and often governments, are affected by the human factor. General Allenby's strategy in Palestine at the end of the War is an excellent example of this. It is claimed in some quarters that one of the greatest causes of our failure on the Gallipoli Peninsula was due to our not realising the fine fighting capabilities of the Anatolian Turk. In the campaign under consideration the actions taken by commanders on either side were again and

again biassed, either consciously or unconsciously, by estimates of the abilities or weaknesses of opponents. In estimating the possibilities of achieving results in 1932 comparable with those realised seventy years ago it is, therefore, only fair to make the following presumptions.

In the first place we must presume that there are the same civil and governmental conditions. We must visualise Lincoln and Stanton, constantly worried about the safety of Washington, interfering with the plans of their military Commander-in-Chief ; and on the side of the Confederates, Jefferson Davies backed so strongly by Lee. Then again, we must assume the same military commanders. Jackson's knowledge of Banks and the latter's fear of Jackson ; Lee's knowledge of Abraham Lincoln ; Fremont's energy until he was faced with the prospect of battle ; Ashby's daring, as well as a hundred and one other equally important personal factors, governed the moves and countermoves of both commanders and politicians. Lastly we must presume that the troops of both sides were animated by the same spirit. A spirit which is so reminiscent of that which inspired the Anzacs and so many of our other Dominion and Colonial troops during the Great War.

Importance of Information.

It is difficult to say in which direction modern developments have made most difference to the conduct of war both in the strategical and in the tactical fields. The factors selected in this article are not necessarily claimed to be the most far reaching, for in war each development will play its part as a section of the mosaic which goes to make the whole.

Since 1862 great strides have been made in the collection, collation and distribution of information. The development of the air arm has made long distance reconnaissance more effective. Large concentrations and big movements of troops can, under reasonably good conditions, be seen from the air. Close reconnaissance makes it more difficult for troops to conceal positions which they have taken up ; the extent of positions can be gauged ; the movement of reserves can be located and the position of supporting artillery can be fixed. By means of wireless and other telegraphic means, information, from whatever source it is obtained, can be transmitted more surely and more readily than in the past. Finally the staff organization of a modern army is such that information from all sources can be readily

checked and systematically correlated. The same staff can be expected to distribute information in the shortest space of time and to all to whom it may be of interest.

It is difficult to over-stress the importance of information. Lack of it means doubt, and doubt and uncertainty are among the worst enemies a commander has to fight. Given knowledge and given ample warning, then bold movements can be made. These can be undertaken, moreover, in comparative certainty as to both their possibility and their effect. The gaining of information is a first principle, the neglect of which will nearly always spell disaster.

Two Principles Regarding Information.

There are, however, two fundamental principles in dealing with this question of information. If these are neglected, no matter how improved the means of obtaining, transmitting, collating and distributing, little, if anything, will be gained from all that the most modern of developments can achieve. In the first place it must be asked for. The commander must be quite certain what he wants to know. He must also ask in such a way that those who seek out his information can be in no doubt as to his requirements. The second principle in regard to information is that it is useless if not acted upon. Preconceived ideas as to the action that an enemy might take should never be allowed to discountenance contrary information, until every step has been taken to justify the commander adhering to his original idea.

Application of the Principle of Information in the Valley Campaign.

During this campaign there were many occasions on which, had information been fuller, in the Federal camps, vastly different results might have been achieved. The point of interest is the extent to which information would, in reality, have been fuller had all present day resources been available.

Among the most interesting of the occasions to which reference has been made were :—

1. The return of the Confederates to the Valley on Sunday, the 4th May.
2. Stonewall Jackson's rapid advance up the Lauray Valley.
3. The almost miraculous escape of the Valley Army on the 30th and 31st of May.

The Return of the Confederates to the Valley on Sunday, the 4th of May.

On April 30th, if not before, General Banks had certainly made up his mind that Stonewall Jackson was retreating to Richmond, disorganised and demoralised. It does not appear to have been until the 3rd May that he thought Jackson was advancing on Harrisonburg.

The concentration of railway vehicles at Gordonsville would, it is fair to presume, have been seen, had the Federal General had the benefit of air reconnaissance. This would merely have strengthened Banks in his belief that Jackson was leaving the Valley. The latter's movements between the 1st and 3rd of May were carried out in such appalling weather conditions that little or no air reconnaissance would have been possible. In any circumstances such information as the air would have given him would but have confirmed the fear which on the 3rd of May had definitely decided him, quite contrary to all his previous reckoning, that Jackson was marching on Harrisonburg.

General Banks knew that Ewell's division had concentrated at Elk Run, but over-estimated his strength. This General seems to have had a tendency to over-estimate the strength of his opponents, and it is extremely doubtful if his air arm, in view of the weather and the topographical conditions in the Elk Run, would have given him any more reliable information than that which he had.

As Banks, however, had by this time been ordered to withdraw to Strasburg, it is not likely that air confirmation of either Jackson's or Ewell's movements would have produced anything more than did his despatch of the 3rd May, which, in point of fact, only actually resulted in his being permitted to retain Shield's division.

Jackson's rapid advance up the Lauray Valley.

On the 23rd of May Banks was completely surprised by Jackson's rapid advance up the Lauray Valley. Whilst it is true that he was very inferior in strength to Jackson, it is not easy to understand why he did not make better use of the 3,500 cavalry under his command for providing him with information. On the 20th of May he sent a battalion of 100 infantry and 30 troopers 11 miles down the Lauray Valley. In spite of reports received from this reconnaissance to the effect that Confederate troops were expected to advance by this road, he took literally no steps to satisfy himself as to the truth of this report. His only action, in fact, was to withdraw this weak reconnaissance

detachment. A force of 300 cavalry with clear orders to look for an approach up this line, and to give him full details as to the strength of such columns as might advance by this route, might have told him much. One cannot help but contrast this negative attitude with the action which a man of the energy of Stonewall Jackson would have taken. Perhaps the most interesting lesson to be learnt from the study of these operations, is the bold offensive use Jackson made of his cavalry and the importance which he attached to the gaining of information.

To take the actual facts as we know them, General Jackson entered the Lauray Valley on the 21st of May and from the wooded slopes of the hills developed his attack on Front Royal of the 23rd May. During this period Banks did not send a single trooper down the Lauray Valley. He was convinced that Jackson would approach his position *via* the main turnpike. It is scarcely likely, therefore, that this same General, suffering from the same pre-conceived idea, would have ordered a close air reconnaissance of the Lauray Valley. Presuming, however, that he had been persuaded by his staff to do so, it is doubtful if he would have credited the resultant information as an indication of anything more than the move of a portion of Jackson's force. One can rather imagine him looking fruitlessly for his opponent on the direct road to Strasburg.

Topographically these valleys offer far greater chances of concealment to the movement of troops from air observation, than a commander might normally expect. Rain, and the almost invariable clouds which at this period hang over the hills, would all tend to increase the difficulties for the air observer. In fact, it would seem that with the display of a little skill the movement of troops could be so concealed as to make estimates of their numbers, if not their actual discovery, by close reconnaissance machines, extremely difficult. We can be quite sure that a man as astute as Stonewall Jackson would have taken full advantage of both these factors.

The almost miraculous escape of the Valley Army on the 30th and 31st of May.

The inactivity of Fremont and Shields which resulted in the Confederate Army being able to make good their escape on the 30th and 31st May, had only one cause. This was lack of information.

Had the two Federal commanders known Jackson's actual strength and had they been in close communication with one another, the dead weight of uncertainty which clogged their movements would very largely have been lifted. Fremont with a force of 15,000 had allowed his advance to be checked by Ashby, with but 300 troopers. Fremont, we know, was considerably stronger in cavalry, which, boldly handled, should have shown him the absurd weakness of Ashby, quite apart from indicating to him at least Jackson's movements if not his actual strength : but once again it is the Confederate General who makes full use of his reconnaissance troops gaining contract with his enemy and never leaving him unwatched for an instant.

Now to turn to the other side of the picture. On the Sunday, on the road to Front Royal, Confederate patrols only encountered a few scouts. Shields, apparently deceived by the demonstration of but a brigade from Winchester, had allowed the day to pass without decisive action ; beyond pushing a brigade towards Winchester and taking up a generally defensive attitude, the Federal General did nothing. It will thus be seen that neither Northern Commander seemed to realise the vital necessity of obtaining information of the enemy's real strength, movements or intention. Neither seemed to realise what the paralising effect of not having this information would be and, as a corollary, neither seemed to realise that to gain information no effort is too great. These Generals could not, moreover, complain that they were without adequate means of obtaining such information. Had both of them been equipped with up-to-date machinery in the form of air reconnaissance, wireless telegraphy and intelligence staffs, it may be claimed on their behalf that they would have shown greater enterprise, but once again climatic conditions, over which they had no control, would have reduced the effectiveness of close air reconnaissance to an almost negligible quantity. But both knew of Jackson's movements, each knew where the other was, and any more detailed information regarding their enemy would unquestionably, even under present day conditions, have had to be fought for.

Conclusion.

In fact it is extremely doubtful if Banks, Fremont or Shields would have gained materially had they had to fight their battles with all the advantages that modern communications, staffs and air

services would have given them. Each showed a fatal lack of appreciation of the real value of information. Where Stonewall Jackson fought to gain knowledge of his enemies, the latter appeared satisfied, either to wait on events, or to rely on their own judgment—judgments based on what they wished their enemy to do rather than what he was doing.

To many this indictment of these Federal leaders may seem to be too sweeping. I suggest, however, that without knowledge of the enemy's position, his strength and his movements, a commander is at so great a disadvantage that not only is he justified in taking almost any steps to satisfy his very justifiable curiosity, but that it is indeed his bounden duty to take such steps. At Kernstown Jackson fought for knowledge. He lost his battle, but he had gained contact and knowledge—contact, which from that moment until he finally left the Valley, he never for one hour lost. When he retreated he left Ashby in touch. When he slept, Ashby was awake. The Federals were always aware of Ashby's presence. When Jackson left the Valley on the 3rd May, Ashby remained in constant touch with both Banks and Fremont. When Banks went to Strasburg, Ashby followed.

Stonewall Jackson's secrecy, and the methods he employed for covering his own movements, are no more worthy of study than are the steps which he took to keep himself informed of the activities of his opponents.

THE PHILIPPINES AND THE PACIFIC PROBLEM.

By Captain M. E. S. Laws, M.C., R.A.

The United States House of Representatives has recently passed a Bill under the terms of which the Philippine Islands will be granted complete independence within eight years. Though the bill in question is not yet law, it is unlikely that the decision to withdraw from the Philippines will be seriously opposed in the Senate, since, as far back as 1916, the latter body was in favour of granting independence to the colony within a period of four years. It is proposed therefore in this article to consider the probable effect of this policy on the Pacific problem, with special reference to the interests of the British Empire.

In 1898 the United States, already indignant at the mysterious destruction of the battleship Maine in Havana Harbour, declared war on Spain with the avowed object of freeing Cuba. On the last day of April, Commodore G. Dewey entered Manila Bay with a small cruiser squadron and next day destroyed the Spanish Fleet. Three months later after capturing the island of Guam, a force of 11,000 United States troops arrived and on August 13th Manila surrendered. The islands, together with Guam, were later ceded by treaty to the United States while Cuba became virtually an American Protectorate. Thus as a result of this war America abandoned her policy of isolation and became to some extent at least, an Imperial Power.

Cuba was evacuated in 1902, though the United States retained a naval base at Guantanamo and reserved the right to intervene at any time in order to protect the independence of the island. The inhabitants of the Philippine Islands, who had for years fought against Spain, expected to receive similar treatment, and when they were disappointed rose against the Americans. Spasmodic guerilla fighting went on till July, 1907, when a civil government was set up which included some Filipino representatives. From then onwards the policy of educating the people for the responsibilities of self-government has been pursued with great energy, and the demand for independence has become increasingly insistent. A general election was held in 1907 when the first Legislature met, and step by step since then American control has gradually been relinquished. During this period the

islands have developed, trade has prospered and a comprehensive educational policy has been firmly established. The time is fast approaching for America to withdraw her last vestige of control and for the complete independence of the islands to be announced.

The occupation of the Philippines and of Guam by the United States was followed by the opening of the Panama Canal. Though by the terms of the Hay-Pauncefote Treaty of 1901, the Canal is "free and open to the vessels of commerce and of war of all nations, in peace or war, on terms of equality," it has been heavily fortified and is garrisoned by a division of American troops. The Canal allows the United States Navy to be rapidly concentrated in the Pacific if necessary, and its use would obviously be forbidden to an enemy Power in time of war. To protect her lines of communication from the Pacific Coast to the Philippines, America also established a series of naval bases in the Pacific—at Dutch Harbour (Aleutian Isles), Pearl Harbour (Hawian Islands 4,700 miles from Manila), Guam (1,500 miles from Manila) and Pago-Pago (Samoa). Of these, Dutch Harbour, an ice free port, flanks the approaches to San Francisco from Japan, while Pearl Harbour, which is now a first class base with a large military garrison, is a convenient station from which to operate in defence of the Panama Canal.

Just before America acquired the Philippine Islands, Japan extended her possessions by seizing Formosa and the Pescadores from China (1895). In 1902 she consolidated her position by making a defensive treaty with Great Britain, while three years later she virtually annexed Korea and established herself at Port Arthur. Her naval bases at the Pescadores (500 miles from Manila), Formosa and in the Japanese islands themselves, enabled her to threaten the Philippine Islands and the long line of communications to Guam, Pearl Harbour and the Pacific Coast. After the Great War, Japan acquired as a Mandatory Power, the Ladrone, Palau, Caroline and Marshall Islands, thus definitely establishing herself athwart the direct route between Manila and Pearl Harbour. It at once became clear that modern aircraft and submarines based on these islands, would make it very dangerous for an American fleet to operate in the Western Pacific and would prevent the movement of troops by sea between America and the Philippines.

The situation thus created appeared so dangerous that a conference of Powers was held in 1921, which resulted in the Five Power Naval

Treaty. By this it was agreed that certain restrictions on the size and number of naval units should be enforced by Great Britain, United States, Japan, France and Italy and that until the end of 1936, no fortification of naval bases in the Western Pacific should be permitted. This latter clause prevented the completion of the ex-German naval station at Jaluit in the Marshall Islands by Japan, and also stopped the further fortification of Guam by America, but the general situation still remained favourable to Japan at the expense of the United States.

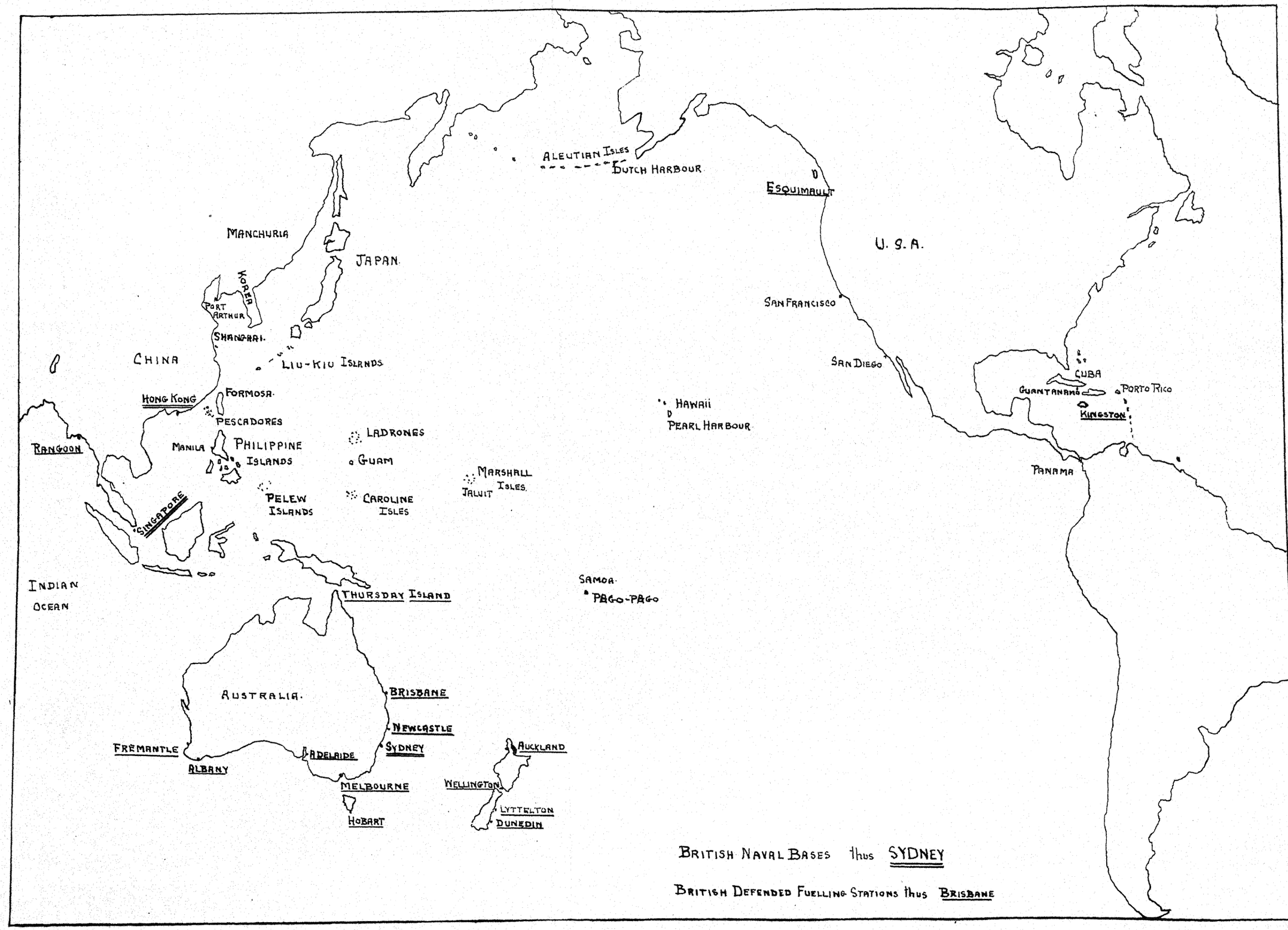
The already difficult position in which America was thus placed as regards the defence of her possessions in the Pacific has been made still more dangerous by certain economic factors. It is now realised that Japan must face two questions which at present menace her very existence as a nation, and the possible solution to both these problems may well involve her in hostilities with other Powers. The first of these economic problems concerns trade and the second emigration. Japanese industries have developed at an extraordinary pace during recent years and the obvious market for her manufactured goods is China, where a large population only awaits tranquility and ordered government in order to absorb the products of the Japanese factories. Furthermore, Japan needs coal and iron which can most conveniently be obtained from China, so that the main requirements of Japanese industrialism—a source of raw materials and a market for manufactured goods—are available. Japan therefore is determined to capture this outlet for her trade and there is always the possibility that trade rivalry may lead to international friction, for at the present moment China is probably the most tempting market for the industrialists of Europe and America. It is this need for a market that has prompted Japanese policy in China for several years and has already led her into difficulties which she has attempted to overcome by the use of force.

The problem of emigration is no less likely to cause international friction. Japan is overpopulated and must seek an outlet for her surplus workers. China is already overcrowded and though Manchuria has absorbed a certain number of Japanese colonists, this province alone, even when it is fully developed, cannot accept the total number of those who will be forced by economic pressure to leave their own country. The United States has since 1903 restricted Japanese emigration into the Pacific Coast States by law, and it is evident that no outlet

for colonists can be sought in that direction. In 1924 a particularly stringent Anti-Immigration Act, designed primarily to prevent Japanese settlers entering the U. S. A., was passed by Congress. Australia and New Zealand, being thinly populated and having temperate climates, are suitable for Japanese settlement, but both countries are firmly determined not to admit aliens who would almost certainly introduce a racial problem which it is most desirable to avoid. Thus in whatever direction she turns in an effort to find a suitable outlet for her surplus population, Japan is bound to be opposed by one of the great Powers. This has naturally led Japan to safeguard her position in the Pacific as far as possible and she has succeeded in securing control of all the approaches to China by sea.

The British interests in the Pacific are more easily defined. We must at all costs retain control of the approaches to the Indian Ocean and keep open our sea communications with Australia and New Zealand. In addition our trade interests in China are considerable and we naturally desire to keep our share of this market, but no trade route vital to the Empire passes through the Northern Pacific. Our chief bases in the Pacific are at Esquimalt, Sydney, Hong-Kong and Singapore, of which the two latter are the most important, since it is in the Western Pacific that our chief interests and dangers lie. Hong-Kong is the chief British trade centre in China, but, under the provisions of the Five Power Naval Treaty its defences cannot be increased and its docking facilities are inadequate for capital ships. Singapore is now being developed as a Naval and Royal Air Force base suitable for a battle fleet and is well adapted for a naval force charged with the defence of the eastern entrances to the Indian Ocean and of our sea comunications with Australia. The minor naval base at Wei-Hai-Wei on the north China coast has now been given up by the British. Sydney is the principal base for naval forces in Australian waters, and defended fuelling stations exist at Thursday Island, Fremantle, Albany, Port Adelaide, Melbourne, Newcastle, Brisbane, Hobart, Auckland, Dunedin, Wellington and Port Lyttleton.

Under these conditions it is of interest to consider how the American evacuation of the Philippines will affect the general situation in the Pacific. Strategically America will profit since she will no longer need to maintain a garrison in a dangerously isolated situation far from support; the loss of a naval base in the Western Pacific is not so serious as it may at first sight appear, for the communications with



BRITISH NAVAL BASES thus SYDNEY

BRITISH DEFENDED FUELLING STATIONS thus BRISBANE

Manila would be so precarious in time of war that it could hardly be expected to withstand a determined attack. Economically America will to some extent gain by the new situation since Philippine exports to the U. S. A. will be classified as foreign goods, and will have to pay tariff, while at present they are given preferential treatment. On the other hand the evacuation of a colony will affect American prestige in the East and particularly in China, where the U. S. A. has special trade interests. Japan will no doubt rejoice at the surrender of an American base in the China Seas, wherein she can brook no serious rival. Not only will the evacuation of the Philippines remove a possible menace to her trade activities, but it will also tend to open the way to her emigration policy southwards. Her island possessions in the Pacific will then stretch south-eastwards from Japan to the Equator, barring the westward routes from the United States.

The new policy is perhaps not so favourable for the British Empire. In view of Japan's need for an outlet for her surplus population, it is natural that Australia and New Zealand should regard with suspicion the removal of any obstacle from her path towards the south. It will therefore be greatly to our interest to ensure the effective neutrality of the Philippines in order to prevent any power from obtaining a footing so close to Australia. At the same time the American withdrawal will not adversely affect the safety of our main line of sea communication with Australia, nor will it alter the problem of controlling the eastern entrance to the Indian Ocean.

It may be expected therefore that the strict neutrality of the Philippine Islands will be an essential part of our policy in the Pacific in the future. To enforce this justifiable demand a British fleet may at any time be required, and such a naval force must be provided with a fully equipped and conveniently situated base. The wisdom of developing the naval and R. A. F. base at Singapore becomes even more apparent in these circumstances and should to some extent allay any anxiety in Australia and New Zealand which the recently announced American policy in the Philippines may cause.

THREE ARMS AND SIX LEGS.

By "Phoenix."

Can we afford luxuries? Ask anyone. We cannot.

Can a desperately hard-up and hard-bitten army afford a Rolls-Royce which can do eighty miles an hour on a by-pass road, but which will ruin its lovely paint, damage its streamline body, and be a confounded nuisance if asked to move across muddy, stony and broken ground? It cannot.

This article isn't about Mechanical Transport or armoured cars. It is about cavalry. I propose giving the cavalry a bunt from behind. As a cavalryman myself I feel entitled to do so.

I have been through it all. The shining boots (seven pairs!), the perfect breeches, the thrill of the lance pennons and the feeling of compassion for the P. B. I. I know it well. I have known the keen interest and pride in a squadron of shining, well-trained horses; the anxiety for their welfare; the fear that they may get damaged, lamed or made thin and unsightly by overwork or rough usage. Any cavalryman worth his salt, feels all these things and quite rightly. Who has any use for the casual horsemaster, the horse soldier who does not care for his horses?

Equitation and the training of horses fills up so much of the horizon. For them we prepare soft riding schools. Carefully we deal with the ground round the jumps. We choose flat open parade grounds with as good surfaces as possible. On these we parade day by day. As for the jumps they are mostly imitations of obstacles found in England and places outside India; the thorn fences, brush-wood hedges, the banks and walls and timber jumps of other countries. Over these we train our horses. The take-offs and the landings are sound and soft. All this is good gymnastics—physical jerks which balance and supple a horse without risking the blemishes and break-downs of rough country. It is all estimable and necessary. True, but what is the effect on the mind of the cavalryman, both officer and man? Mentally well-balanced as he may be he cannot but regard these conditions as those normally suitable for the horse; he cannot but consider that anything rougher and more likely to damage a horse as a thing to be avoided. The fact is, however, that horses can adapt

themselves to circumstances. Given practice in moving over rocky country they learn to put their feet down without suffering damage and, what is more, their feet harden and so withstand the jar. It is surprising how much can be done to acclimatise a horse to the horrible going on the North-West Frontier.

We hear of the expression 'cavalry country.' In most minds this conjures up soft going, undulating country with obstacles, if any, of a kind to be found among the Troop jumps of a cavalry parade ground.

The army in India is trained for a specific purpose, for operations in country as is to be found on the North-West Frontier and beyo Cavalrymen hope that when war comes they will be asked to move over great open spaces where the mobility of the horse can be used to the best advantage. But war on that scale, if it comes at all, comes but seldom and few men and horses will see it. The war we are all likely to see is something less pretensious and on not so grand a scale. It is the war we have in peace time; the little actions on the North-West Frontier in normal times and the bigger actions of small expeditions in the same place. If we can tackle these smaller operations we can with ease take on the bigger wars and the open plains.

The cavalry spirit is a thing to be nurtured. Much has been written of it, and it is continually referred to in speech. Many do not know its meaning and indeed the experts differ to some extent in its definition. A spirit of dash, of adventure, of taking risks, of speed, of quick results? Is it necessary to sit on a horse to achieve all this? The same spirit pervades the airman and the sailor in his destroyer. It will be found in the commander of light tanks and armoured cars.

There seems to be the fear that if you allow the cavalryman to get off his horse he will lose the cavalry spirit. Carry this to extremes and you will say that it is better for the cavalryman to sit on his horse and do nothing than to get off his horse and get busy on his feet. Mounted infantry tactics are looked on askance. They are contrary to the cavalry spirit which is epitomised in the mounted charge, the *arme blanche*. If to allow the cavalryman to get off his horse to fight on his feet is going to damage his cavalry spirit then by all means forbid any such thing. But it is not so. The spirit of dash, of adventure, of taking risks and of quick results can be introduced into all work. The methods employed by cavalry on foot necessarily differ from those practised by infantry, and they must be taught.

A perusal of the records of early frontier operations will show numerous references to "spirited cavalry charges," usually carried out by one or two troops or less. They were monotonously successful. In those days the cavalry had no firearm; the enemy often had no rifle or gun. There was only one thing to do—to charge. We can do more now; we have rifles. So have the enemy and the charge is consequently more hazardous and less likely to be successful if carried out haphazard.

II.

All the above has been a kind of turning movement. I could have said at once at the end of my first paragraph that cavalry which can only sit on its horse and charge may be lovely as the Rolls-Royce saloon but it isn't any use in, say, Waziristan. I could have gone further and said that a cavalry regiment that wins all the musketry and machine gun competitions, which gets an O. K. report for signalling, which scores full marks at inspections, whose officers have all passed for promotion or the Staff College, such a regiment, I say, is about as useful as a broken curb chain if, when called upon to work in rugged frontier country, its horses all go lame and knock themselves to bits.

The Rolls-Royce engine is all right and can negotiate Waziristan if given the means, say, another pair of wheels or a track. "But that costs money" sez you. "So does an investment," sez I, "and if you don't invest you don't draw any dividends." We cannot afford the Rolls-Royce which is fit only to adorn the garage and the broad highway. We cannot afford a cavalry which does not pull its weight in frontier operations.

"But" sez you, "the cavalry have rifles. Why can't they do all that is required?"

(Now, that is the question I wanted you to ask because it enables me to write what follows.)

"Because," sez I, "they havn't got bayonets!"

Isn't it curious that at the end of one of our big wars—I refer to the one about fifteen years ago—all cavalrymen whether in Europe, Asia, or Africa were armed with the bayonet, and a few years later the cavalry had no bayonets? The only reason for the adoption of bayonets was that the cavalry found that they had need of them. In peace, one presumes, they do not have need of them? They are not picturesque, they are an extra weight on the horse, they give the

cavalryman yet another weapon to learn, they are costly to supply, they—oh ! all kinds of things. Yet when the next war comes along the cavalry will demand bayonets and of course will get them.

One hot summer morning the writer of this paper took out a weak squadron, about fifty strong, to round up some raiders. The raiders were duly encircled. The cordon was drawn tighter, until the gang was confined to a small area intersected by deep fissures and caves. Bullets were being freely exchanged ; the horses had by now been left behind in safety under cover. The time had come to finish the show and go in. The time had come for the '*arme blanche*.' "What to do ?" as the *babu* says.

The alternatives were :—

Go in with the rifle alone and trust to snapshooting.

Go in with the sword or lance alone ; the rifle slung.

Go in with the rifle in one hand and the sword in the other.

No, Sir ! Not against a desperate gang of Pathans who are nice shots at fifteen yards and who also had knives. The Indian officer wanted to send back to cantonments for bayonets borrowed from the infantry. We were saved the trouble. The infantry came themselves in lorries, fixed bayonets and walked into the gang. There were a few casualties. The gang went to ground in the caves and eventually the remnants of them surrendered.

The cavalry regiment embroiled in this very small affair demanded bayonets and got them. (*N.B.*—The late war was still on). A mighty oath was taken that never again would the infantry be allowed to pick the fruit of such encounters. More however came of it than that. There was more doing on the North-West Frontier in those days than the chase of raiding gangs. This regiment decided that what an infantryman can do a cavalryman also can do—within limits.

Piquet a hill ? Yes, certainly, so long as it isn't too high.

Attack home across country which is too difficult for horses ? Oh yes, so long as we don't go too far from the horses. Armed with bayonets it was possible to relieve the infantry of many jobs.

Did this regiment lose its cavalry spirit ? It did not. Confident in its powers even if dismounted, it took chances when mounted which it would not otherwise have risked. The horses, after several years on the frontier had feet of iron, and what is more they knew how to put them down when moving fast on the rock strewn hills and valleys. Few went lame.

Our Rolls-Royce had its six wheels and its track. The cavalry could take on jobs it could not manage before. No longer relegated to the open country and fire action it could pull its weight under all circumstances.

If any cavalryman or other reading this article doubts the necessity of the bayonet for frontier fighting let him do this. Let him set his squadron the task of establishing a piquet on a hill which offers good cover and which is presumed to be occupied; occupied, not by the usual weak-kneed 'enemy' of T. E. W. Ts. but occupied by determined, well-armed tribesmen. Let him lead the foremost troop to the top. Let him meet the counter-attack of the tribesmen as the covering fire lifts. Does he want a bayonet? I'll say he does.

I'll say more. I'll say that it is definitely unfair to the men to ask cavalry to carry out their legitimate tasks in frontier warfare without bayonets.

As there is no manual which gives in detail and fully the tasks of cavalry in modern frontier fighting, the reader and I may differ as to what constitutes a legitimate task. He may take it that it is more than is contemplated by the "normal warfare" cavalryman.

III.

I like writing stuff like that! It makes a soldier's life seem romantic and what not. Let us now come down to real life, in other words money. Someone said that money and the medicals are the only things that matter now. '*Eheu fugaces*,' (whatever that may mean.)

It is said that one never sees a dead donkey. They occur all the same. What has happened to all the old bayonets? Less than 9,000 are needed to arm all the cavalry in India and less than 2,500 to supply those stationed on the North-West Frontier.

The real trouble is that the cavalry don't want the bayonet *Now*! Life is already full of difficulties. "Why add to them?" Well, because....Well, read this article again from the beginning.

[Editor's Note.—*Readers who may be interested in the subject of the above article will find much valuable and practical information in "The uses of cavalry in operations on the North-West Frontier of India," by Major C. A. Boyle, D.S.O., which appeared in the July* 1926 *number of this Journal.*]

SHAN HAI KUAN.

A SHORT ACCOUNT OF A BRITISH MILITARY CAMP IN NORTH CHINA.

By Major E. W. N. Wade, M.C., The East Yorkshire Regiment.

It does not fall to the lot of every British soldier to be stationed in far distant North China.

The pleasure of being encamped in such a delightfully quaint and picturesque place as Shan Hai Kuan, nestling, as it does, under the shadow of the "Great Wall of China" will, therefore, only have been experienced by a few lucky units and individuals.

To those who have stood upon the greatest wall in the world and gazed from mystic China into warlike Manchuria—the stronghold of the late Dictator, Chang Tso Lin—this brief account may revive pleasant memories and, moreover, it may possibly prove of interest to those who may be fortunate enough to draw "North China" out of the "Reliefs Bag."

The Great Wall is an everlasting monument to the labour of a great Empire now sadly shattered and rent asunder by internal strife. It was erected for the defence of the Empire against neighbouring hostile tribes; wild and savage hordes which swept down, from time to time, from the North.

The normal British garrison in North China is one battalion distributed as follows:—

At Tientsin	.. Battalion Headquarters. Headquarter Wing and three companies.
At Peking	.. One company, Guard to the British Legation.

The usual tour for a battalion in North China is two years. But owing to the very abnormal conditions which prevailed during the time that my battalion was quartered there, from 1925 till 1928, its tour was extended for an extra year.

"Abnormal times" indeed, for in these terms do the local foreign inhabitants describe the present period of unrest in modern Republican China.

The old " China-hand " will, however, tell the new arrival that everything in China always has been and always will be abnormal from a western point of view. Almost everything, one soon discovers, is topsy-turvy and contrary to British and European customs. For instance, amongst the things which appear strange to, and most impress the British soldier on landing in the country are, the wearing of trousers by the women whilst the males garb themselves in long full skirts; the wearing of white at funerals and scarlet at weddings and the inhuman and brutal public executions, where men are beheaded, for what we would call trivial offences. For example, two Chinese soldiers were beheaded in Peking in 1926 for forcing an entry into a theatre without paying. The writer saw their heads, suspended in baskets from poles, outside the theatre in question in the famous Chien Men. They remained there for several days. Great crowds visited the scene completely blocking the traffic in the street. It is all very strange and incomprehensible to the Western mind.

Shan Hai Kuan is the sea-side resort to which the Tientsin garrison moves for the summer. The move generally takes place early in May, the troops returning to barracks at the end of September. From May to September the weather is ideal, though a considerable rainfall is often experienced at the end of July and in early August.

There are two very good reasons for this move to the sea from hot and stuffy Tientsin. The first and chief one is to allow the Battalion to carry out field training and to fire weapon-training courses, both of which are impossible at Tientsin owing to lack of facilities, since no open range or suitable training areas are available. The second reason is a matter concerning the health of the troops and their families.

The climate of North China is one of extremes—extreme heat in the summer, (114 degrees is often registered in Peking in July), and extreme cold in the winter. Ice, snow and driving cold winds are normal conditions from November to March, whilst the river Hai Ho at Tientsin becomes filled with lumps of floating ice. Shan Hai Kuan is several degrees cooler than either Peking or Tientsin in the summer, since there is always a fresh breeze blowing off the sea.

Although it is not always feasible, owing to the various " war situations ", to send the whole Battalion away together, every

endeavour is made to get them down in parties and for the women and children to go also.

The City of Shan Hai Kuan is situated at the extreme eastern corner of the province of Chih-Li, about four miles from the Manchurian frontier. It is a walled city, the eastern face of which forms part of the Great Wall. It stands on the Peking-Mukden railway and for this reason is a city of some importance from a Chinese military point of view. A considerable number of the late Chang Tso Lin's troops (a weak Division), under the misnomer of "Security Troops", used to be stationed there. The city lies about midway in an open, but well cultivated, plain stretching from a high and imposing range of mountains to the sea. The name is very apt as the literal translation of Shan Hai Kuan is " between mountains and water."

Strategically it blocks the Mandarin road and railway from Peking and Tientsin to Mukden just west of the Manchurian border. Shan Hai Kuan played a very important part in the campaign of 1924-25. Much of the heaviest fighting took place to the north and north-east of the city.

Tactically, the walls and the series of ridges of hills in the vicinity, lying astride the main line of communications, form an exceptionally strong zone of defence against an enemy advancing either from east or west. The defence of the plain is also assisted by the main range of mountains which runs more or less, parallel to the road and railway communications.

The Shan Hai Kuan position, with one flank resting on the sea and the other secured in the mountains is, undoubtedly, the key to the defence of the bottle-neck entrance to Manchuria against any attack from the West along the railway.

Historically the city is interesting, for it was here in 1644 that the great Ming General, Wu Sen-Kwei, requested the Manchus to come to the help of the Mings and assist him to recapture Peking from the rebel troops of Li. The Manchus accepted and drove through to Peking, which they took. Having occupied it they refused to restore it to the Ming Dynasty.

The mountains which tower above the city, silent witnesses of the fierce and bloody battles of past ages, have also the reputation of housing the ever present bandit gangs. A Chinese bandit may be a perfectly peaceful farmer at one moment and a fierce cut-throat the

next. It is all a matter of necessity. The so-called bandit mobs of latter years have been recruited from disbanded, disillusioned and unpaid soldiers, who have deserted from their respective " War Lords" another curse of these never ceasing civil wars—illegitimate children of this impossible Republic. These self-styled and self-appointed War Lords have been in local control—as far as control in any shape or form is possible in China today—of vast areas ever since the fall of the old Empire.

The British camp, which takes its name from its proximity to the city, is located in a south-easterly direction, about three miles distant on the coast. The old Chinese Fort No. 1, now known as the British Fort, and over which the Union Jack flies, stands some sixty feet above the sea. The exterior of the fort itself is in a somewhat derelict condition, the bulk of the stones which faced the earthworks having been removed by enterprising Chinese to build houses for themselves and bungalows for the foreign summer visitors.

The fort is, however, of certain historical interest as it marks the extreme end of the Great Wall where it stops a few hundred yards short of the sea. There is an old Chinese legend that in B. C. 260, the Emperor, standing where the British Fort now stands, looked out to sea and called the place the " Beginning of the World". In those days it might easily have appeared to be so. But to return to modern times; the officers are accommodated in tents on a grassy plateau within the walls of the fort. Here, also, are situated the Commanding Officer's and the Quartermaster's bungalows, quarters for the married N. C. O's. and men; and the Officers' Mess. This is an airy building attractively placed amidst trees and fronted by brightly coloured flower-beds. All of these are permanent buildings of stone or brick. The Commanding Officer's bungalow, Officers' and Sergeants' Messes each have a hard tennis court.

Just outside the main entrance to the fort and to the north-west is a pretty and well wooded natural arena, known as the " Dell". Here, owing to the broken nature of the ground, the training of small units, *e.g.*, sections and platoons, can be carried out. In these pleasant surroundings the Band plays in the evening and the Drums beat " Retreat." Both of these performances provide endless entertainment for the Italian, French and Japanese troops who are also stationed

in ex-Chinese forts along the western side of the Wall. The Drums, in particular, seem to interest them considerably.

From the British fort the Wall runs almost due north for some twenty-five miles and then turns in a general westerly direction to the north of Peking.

The main camp is about a quarter mile from the fort and is exceptionally well placed on flat and dry ground under the shade of tall trees. There are permanent buildings for offices, dining-halls, Sergeants Mess, Stores and Institutes. A bath-house and modern stables have recently been erected. The camp runs its own Cinema which is greatly appreciated by the troops. The camp is surrounded on the north and west by cultivated areas, on the south by the river Ta Shih Ho, whilst on the east, and only a few hundred yards distant, is a 600-yards rifle range of eight targets, running almost parallel with the camp area. Still further to the east is private land reaching down to the sea, upon which a dozen or more modern bungalows have been built. They are very conveniently placed for the camp and several are usually occupied by officer's families, though the rent is rather exorbitant.

The camp and fort are connected with Shan Hai Kuan station by a trolley line off which branch lines run to the French and Italian barracks. The trolleys are mule or pony drawn and complete the journey in about twenty minutes, not always, however, without incident. These mules—even in China—live up to their universal reputations and become easily scared, with the result that the trolley leaves the line scattering passengers and baggage broadcast in the adjoining fields.

There are several rivers in the vicinity, all of which have their origin in the neighbouring mountains and flow in a general southerly direction to the sea. The most important of these is the Shih Ho; with the exception of this river they all become practically dry in the summer, being converted into rushing torrents when the snow and ice on the mountains melt in the spring.

The valley of the Ta Shih Ho is quite beautiful where it winds its way down the steep and wooded ravines in the mountains. Many pleasant and interesting trips can be made into these mountains and along the coast to the neighbouring sea-side resorts of Chin Wang Tao

and Pei Tai Ho. The former is one of the few ports in North China which is free from ice all the year round; it is at this port that the British regiments for duty in Peking and Tientsin disembark.

Pei Tai Ho is the Brighton of North China, it is the fashionable summer resort of the foreign communities of Tientsin and Peking. The majority of the personnel of the Peking Legations move here for the hot weather season. In the case of the British Legation a special compound was allotted to it by the Chinese Government after the Boxer rebellion of 1900. The chief attraction of the place, other than the bathing, is the low range, known as the Lotus Hills, situated near the western end of the Town. Though not of any considerable height, they are very well wooded and afford an excellent view of the surrounding country.

In the mountains above Shan Hai Kuan there are three temples which well repay the energy expended in reaching them; they are, the River Temple (Erh Leng Miao), the Grove Temple and the Cave Temple. The River Temple is eight miles from camp and stands perched alone on a medium sized hill overlooking the Ta Shih Ho. From this point a superb view of the river can be obtained as it bends in and out in the valley below. Lying some half-mile beyond the temple hill, a gigantic single rock rises from the river; in a cavity half way up the side is a shrine, this is known as the Grotto Temple. Good bathing can be obtained in a deep pool of very clear water which skirts the rock.

The Grove Temple is seven miles from camp, lying immediately north of the city. It is concealed in a grove of trees at the top of a mountain some 1,500 feet high. It is reached by a precipitous zig-zag path, terraced with rough steps, up which a donkey or sturdy little Mongol pony will carry one with little or no trouble. Some 300 yards to the east of this temple the Great Wall snakes its way up the side of the mountain lending quaintness to the scene and creating an atmosphere of antiquity. From here one can see for miles eastwards into Manchuria and looking towards the west, to the Lotus Hills beyond Pei Tai Ho.

The furthest and, perhaps, most interesting of the three temples, is the Cave Temple. This lies up in the mountains in a north-easterly direction, about ten miles from camp. It is approached through a

ruined gateway in the Wall built across a deep and narrow ravine. It is a strenuous pull up to the top. The temple itself is contained in a large cave which extends right through the hill, the exit overlooking a wild and rocky river bed, dry during the summer months.

All these temples are within walking distance, but in the hot weather season donkeys or ponies are the usual means of transportation. With the exception of the River Temple, they require a full day to do them properly and with comfort. A donkey and boy can be hired for the day for one dollar and fifty cents, equivalent to about two shillings and nine pence in English money.

With regard to recreation and sport available at Shan Hai Kuan, a most important item where the British Officer and soldier are concerned, the bathing in the camp area is excellent and the beach is sandy and clean. The troops take full advantage of it and it is more difficult to keep them out of the water than to get them in. Regiments in occupation generally hold aquatic sports with excellent results. Two football grounds are available and matches are played with the Italian Naval Detachment quartered in the next fort. The Italians have taken up " Soccer " with the utmost keenness and are rapidly becoming formidable opponents.

There are also facilities for cricket and athletics, a good hard running-track having been recently made.

Riding is a very popular pastime ; the troops patronise the China pony extensively. A pony can be hired for two dollars for a whole day. Just before returning to winter quarters a Gymkhana is usually held, it has proved very popular with all ranks.

Tennis has already been referred to. Fishing, both sea and river, is fair. Shooting is altogether another question, for Shan Hai Kuan and vicinity provides an excellent area for this sport. Snipe, duck and teal are plentiful and many good bags are obtained yearly.

Finally, there is the point of view of military training for which Shan Hai Kuan affords good facilities. A large portion of the time available has to be given up to firing the numerous weapon training courses which have to be carried out each year ; the Army Rifle Association competitions must also be completed. The time left for field training is, therefore, none too plentiful. In spite of this, however, much good work can be put in by companies on the Shih Ho

plain training area. In addition the area lying north of the railway and east of the city offers good ground for battalion exercises. Field firing can be carried out at the foot of the mountains though, owing to the distance from camp, it entails spending the night in bivouac. For the training of leaders, (Officers and N. C. O's.) a variety of suitable localities can be found.

This district being entirely agricultural, the country side is covered with high standing crops up till about the end of August. The month of September is, therefore, the most suitable for the training of the larger units.

To sum up, Shan Hai Kuan offers splendid facilities, both for work and recreation, to suit all tastes. There are, indeed, many worse places in which the British soldier finds himself encamped.

THE NEXT WAR MEDAL.

By B. Arless.

A Commandant of the Staff College once declared that, in his opinion, all young officers on first receiving their commissions should be issued with half-a-dozen assorted and artistic medals. After that, for every four or five years satisfactory behaviour they should be allowed to discard one, until, at last, with high rank they would attain the quiet dignity of unadorned chests. Then, as somebody said on seeing the plainly dressed American Ambassador surrounded by glittering European diplomats, they would look 'devilish distinguished.' Perhaps the Commandant's proposal went too far, but few fighting soldiers can have failed, at some time or other, to have shared his irritation at the fact that the amount of variegated ribbon on an officer's chest may sometimes be in inverse ratio to the number of times he has exposed the bosom it now adorns to the enemy's fire. Indeed a man may wear a brave array starting with a couple of decorations, and running through four or five war medals, *via* a Coronation medal, to the Ruritanian Order of St. Bibulous with palms, and yet never have heard the crack of an enemy bullet in his ear. Of course, one realizes, that an officer with a string of decorations and medals has probably at some time been under fire; the trouble is that there is no set relationship between the number of his medals and the amount of fire he has faced. It is quite arguable, and in many instances, no doubt, true that the soldier safe in rear can do as much to win a war as the one in the forefront of the battle. But human nature being what it is and physical courage being rightly rated as the first of military virtues, it is not surprising that there is a strong feeling that medals should have a closer connection with risks actually run in action.

War medals were originally intended only for those who fought, but it is interesting to see how the circle of their recipients has gradually widened. The Chinese claim to have invented war medals, as they seem to have originated most things, untold centuries ago, but the first British ones were those Queen Elizabeth struck to commemorate the Armada's defeat. They were granted only to certain officers who had taken a leading part in the sea fighting. Some fifty years later

Charles I presented 'badges of silver to wear on the breast of every man who shall be certified under the hands of their Commanders-in-Chief to have done Us faithful service in the Folorn Hope.' There is some doubt as to what exactly constituted the 'Folorn Hope' in the Royalist Army, but it was plainly intended to limit the award to men who had been closely engaged with the enemy. It is also noteworthy that, for the first time, men as well as officers were eligible. The Commonwealth, not to be outdone, followed this in 1650 by the issue of the Dunbar medal to commemorate Cromwell's brilliant defeat of the superior Scottish forces, his ' crowning mercie'. This was the first war medal in the modern sense, for every soldier in Cromwell's force got it, and there was no difference in size, design or metal between that given to the Commander-in-Chief and that received by the smallest drummer boy. No special condition was made that the recipient must have taken part in the actual battle ; in the words of the Parliamentary declaration, it was to be bestowed on all, ' both officers and soldiers that were in the Service in Scotland '. Still, the Protector was not likely to have left undue numbers in the back areas in an emergency and it is safe to assume that few men who got the medal did not see some fighting.

A most prolific issuer of medals in the next century was the Honourable the East India Company, and it is noticeable that it always endeavoured to limit their award to those who had been actively engaged by specifying the actions at which they must have been present or the particular commanders under whom they must have served. Battle fields were still small and fighting was at close range ; to be present at a battle usually meant to be under fire. It is curious that out of nine medals thus issued between 1784 and 1826 only one, that for the storming of Seringapatam, was awarded to all ranks, British and Indian ; the other eight were for the native ranks only, no Europeans, officers or men, being eligible. The type of medal also usually varied with the rank of the recipient—for Subedars a gold one, for jemadars silver, and for sepoys bronze.

The Waterloo medal was, like the Dunbar one, a general issue for all ranks, but special pains were taken to include certain units which had been sent on detached duties just before the battle and had for this reason missed being present at it. There was thus introduced into medal distribution a tendency to include those who, as one might

say through no fault of their own, did not take part in the actual fighting. Speaking generally this widening of the scope of medals persisted throughout the Nineteenth Century, although it was often limited by the custom of specifying that only troops under certain commanders or in certain formations were eligible. It was not until the South African War that all pretence that a medal of necessity meant fighting was abandoned. In 1901, the 'Queen's South African Medal' was awarded not only to all ranks, including nurses, in South Africa, irrespective of whether they had been in action or not, but in addition to the troops stationed at St. Helena, whose participation in the war had been limited to guarding Boer prisoners. In 1902 the range of the medal was further extended to include also the Militia Battalions* which had relieved regular garrisons in Mediterranean stations. For the first time, too, a man could receive two British medals for the same campaign. Medals were evidently becoming cheaper.

Finally the Great War came, and, colossal in everything, its scale of medal issuing passed all records. First, the '1914 Star' was awarded to all personnel, military and civil, who served in France or Belgium on the establishment of a unit of the British Expeditionary Force between August 5th and November 23rd, 1914. It thus included large numbers who had seen no fighting. An attempt was made to render the medal more valuable in 1919 when a clasp, which carried with it the small star worn on the ribbon, was granted to those who had come on duty within range of the enemy's mobile artillery, but a certain number of rear units were also specifically included. The '1914-15 Star' was even more widely distributed as it included everyone, who had not received the '1914 Star' and who was on the establishment of a unit of the military forces in any theatre of war up to 31st December 1915. The most widely embracing of all, however, was the 'British War Medal', whose familiar yellow, blue, white and black ribbon may be worn by anyone who either entered a 'theatre of war' on duty or left his or her place of residence and rendered 'approved service' overseas, *i.e.*, not necessarily in a theatre of war. The Royal Navy gave it to all personnel who performed twenty-eight days' mobilized service anywhere. The British edition of the

*For these battalions the medal was inscribed 'Mediterranean' instead of 'South Africa.'

Allied 'Victory Medal'* was somewhat more restricted than this, but it was given to all who had served on the establishment of a unit in any theatre of war at any time—a wide enough category.

Thus, after the Great War, when medals had been broadcast in millions, no one could tell what they stood for. A man might have all three British medals and yet have passed the war in greater safety than many a civilian in London ; another man might wear only two and have endured almost three years of constant hardship and danger. Medals might mean nothing, or they might mean everything. Still, it is hard to see how this promiscuity could have been avoided in so tremendous a struggle. Whole nations were mobilized, contending forces were strung out across continents, and the complexities of modern armies, combined with the enhanced range of their weapons, made it almost impossible to draw a dividing line between combatant and non-combatant. There was, indeed, a great deal to be said for giving a medal or two to everybody who put on uniform. The vast majority who served were temporary soldiers, and, whether they risked their lives or not, they sacrificed much. To the regular soldier war with all its dangers is his opportunity, his great chance for advancement in his profession ; to the civilian turned soldier it is almost invariably the opposite. He abandons or at the best interrupts his career, usually at its most critical period ; man for man, he risks much more for his country than the regular, and, whether he fights or not, no one need grudge him his medal.

In great wars, therefore, medals must of necessity and probably in justice, be lavishly distributed without much regard to the relative risks run. But should this apply equally to the small wars that fall to the lot of our Regular Army even in these days of peace pacts and disarmament conferences ? This question is especially interesting to the Army in India, for here every few years is almost certain to occur some tribal rising on the North-West Frontier or some disturbance elsewhere that will mean active, and really active, service for soldiers and airmen. These ' wars ', insignificant though they may be compared with the great wars of history, entail severe hardship and not a little danger to those who take part in them. Should this be recognised

*America gave this medal to all who had served on active duty with the United States Army ; France to all who served a minimum period of three months at the Front.

by the award of medals for them, and, if so, what should be the basis of distribution ?

There seem to be two schools of thought on this subject. Indeed, one is reminded of the military attaché, who, when asked what importance was accorded to medals in the Balkan State to which he was accredited, replied that it was really rather hard to say, as the Commander-in-Chief never wore any, while the War Minister appeared at every ceremonial parade in an entirely new set ! On these lines one school would grant medals for a minor campaign or Frontier skirmish much as they were distributed in the Great War ; the other, arguing that this would be to make a farce of them, says no medals at all for anything less than a ' real ' war with thousands of casualties. While these two views are being urged one against the other, it is not unlikely that many a brisk little bit of fighting will pass unmarked by a medal.

The first point to be decided is whether for a regular army it is a good thing to have war medals at all. The almost unanimous opinion, in spite of Commandants of Staff Colleges, is that, properly distributed, they are an immense help to morale. Especially is this so for Indian troops, to whom, as the old ' John Company ' so well recognised, a medal means ' *izzat* ' and ' *izzat* ' means everything. But the award of a medal should be an individual thing, granted because a man has borne himself stoutly in the face of the enemy. Whether he did so with thousands of others in a great battle, or with only his own regiment or even company in a skirmish against the Badmash Khel is immaterial. We must get back to the old ideal that a medal is an acknowledgment of danger encountered or risk accepted. The rough test should be—has the soldier's duty caused him to run a real chance of death or wounds ? If it has, then he has risked his life for his country, and the least his country can offer him is a medal.

It may be urged that the difficulties of applying this rule in practice would prove insurmountable. What would constitute a risk sufficient to justify a medal ? How would it be possible to select men who had undergone the risk ? What about men, who, although in hostile country, had never actually met the enemy ? Would the higher commanders and their staffs ever qualify for a medal under these conditions ? Admittedly these are difficulties, but it has to be a very big difficulty to be insurmountable—especially if it is to be attacked by the British Army.

First, the test for risk should be casualties, both our own and the enemy's, with, of course, the assessment made chiefly on our own losses. The type of enemy should also be considered; fifty well armed Mahsuds would be a distinctly more 'risky' proposition than a hundred bazaar Redshirts. By combined consideration of the total casualties to the forces engaged and of the strength of the hostile resistance, it should be possible to decide whether any operation or action is worth commemorating. Again, to ensure that, generally speaking, only those liable to the risk qualified for the award, it would be essential to abandon the Great War practice of giving medals to everyone who happened to be in some huge area designated a 'theatre of war'. The man who unloads the *ghi* tins at railhead, twenty miles from the nearest hostile tribesman, performs an honourable task, and, no doubt, contributes by his labours to the success of the campaign—but the consciousness of this must be his reward. We cannot have a repetition of the Third Afghan War, when every man west of the Indus qualified for a medal. For the small Frontier or other operation in India definition by geographical area, always peculiarly liable to abuse, should be replaced by the older system of limiting the medal to those who served on certain dates either in particular units or under specified commanders. It will be known what units or formations were in contact with the enemy, and commanding officers can be trusted to see that correct rolls of men present with them at the time are submitted. In most minor campaigns this would restrict the medal to officers and men of mobile columns which had engaged the enemy, to the transport and supply personnel who had maintained them, to the garrisons of attacked posts and to airmen who had flown over hostile territory. Troops who remained in their cantonments or normal stations and those in posts not seriously molested by the enemy would not qualify. Higher commanders and their staffs would probably come under one of these latter categories, and would not, it is to be feared, obtain the medal, but, if the system had been in force for some years they would probably have had earlier opportunities of gaining it. In any case, they and similarly situated officers and men would be eligible for other awards in the form of decorations, brevets and mentions in despatches.

Some such recognised system by which troops who had actually fought in even a very small war could be sure of receiving a medal would have much to recommend it. In the course of years the number of

operations for which a General Service Medal was issued might be large, but the number of recipients would be comparatively small, and they would be carefully selected. The value of the medal as a morale raiser would be enhanced, for it would really mean something both to the man who wore it and to those who saw him wearing it. Frontier and similar service involving hardship and separation from families would become more popular, and the soldier, especially the Indian soldier, would feel that risks cheerfully faced were appreciated by those on whose behalf they were incurred. Those who venture their lives against the King's Enemies do not often gain great material reward; let them at least receive the little "badges of silver to wear on the breast of every man who shall have done faithful service" in face of the enemy.

EXAMINATIONS FOR PROMOTION—A FEW SUGGESTIONS.

With Special Reference to subjects (*a*) & (*c*).

By " Longtimber ".

" The principle duty of a commander is to make decisions. If his decisions are to be sound, it is not sufficient that he be possessed of personal courage, a strong and resolute will, and a ready acceptance of responsibility. He must have, in addition, a thorough knowledge of the principles of war,....."

(*Field Service Regulations* 1929, *Vol.* 11, *Ch.* 1. *Sec.* 5 (2).)

During recent years the writer has been given the opportunity to study carefully, as a member of several examining boards as well as from the Staff point of view, the arrangements for preparing and carrying out practical promotion examinations both at home and abroad.

As a result of these observations, it would appear that the percentage of " Failures " might possibly have been considerably reduced if the candidates had had a clearer conception of what was required of them. It is, however, fully recognised that it is the duty of all officers to keep themselves efficient and up to date, and to prepare themselves for promotion. There may, however, be some who find it difficult to make a start when they find themselves face to face with an approaching examination.

It is hoped that the following few hints and suggestions may be of some assistance to those candidates when commencing to work for promotion.

It will, no doubt, be admitted that the individual training of the officer is, unquestionably, of paramount importance. An officer should consider the passing of his promotion examinations to be a serious matter. He should also remember that his failure reflects indirectly upon his Commanding Officer and the unit responsible for his training.

It is contended that with efficient preliminary instruction and guidance, it should be well within the capabilities of the majority of candidates to pass their examinations successfully at the first attempt.

It is interesting to note that in the latest edition of " Training and Manœuvre Regulations ", which deals with, among other matters, the individual training of the officer, no mention is made of this subject. A few notes dealing with the necessary study and systematic preparation required for all types of examinations, would, perhaps, not be out of place in this volume.

From observations in the field, many candidates lack method when submitting their answers to problems. What they would appear to need is a guide to the type of problem they are likely to be set, a method to work upon together with suggestions of how to set about preparing themselves for these tests.

Although it would seem unnecessary to mention it here, yet it is desirable that candidates should realise the amount of work and forethought which is entailed in the preparation of the schemes which are set for solution.

Immense trouble is taken by the Board in making out the " Scheme " in order that it shall fit exactly into the available ground and be within the scope of the candidates. The scheme and problems, as worked out by the Board, are, in the majority of cases, submitted to the Headquarters of the Command or Formation concerned and are carefully checked by the General Staff to ensure that the examination complies with the official syllabus as laid down in King's Regulations, and that the problems are not too ambitious.

The Examining Boards of to-day fully realise their responsibilities and all possible steps are taken to perfect the scheme. Great care is also taken to see that only reasonable and common sense questions are asked.

Granted then, that the Board is correctly constituted, that the scheme complies with the syllabus and that the candidate is given every facility to display his knowledge. To what causes, then, may a candidate's failure be attributed ?

In the writer's humble opinion the cause of a candidate's downfall can generally be traced to one of the following :—

(*a*). Inability to apply correctly the " Principles of War " in a practical manner in the field.

(*b*). Insufficient instruction and guidancce prior to the examination.

(*c*). A candidate's own neglect to prepare himself thoroughly for the test.

To deal with these in detail :—

(*a*). The most common cause of failure is the inability to apply in practice what has been learnt in theory. These practical examinations are, nothing more or less than, a test as to whether the candidate can put into operation on the ground the instructions which are contained in the training manuals. At the commencement of this article will be found an extract from Field Service Regulations, which lays stress upon this point.

It is the disregard of the doctrine expounded in our training regulations which is the root of the trouble. Many candidates, though they may be familiar with the principles contained in the text-books, are unable to transfer their knowledge to minor tactical situations in the field. In a recent report, issued by the War Office, on a written examination for promotion, the following appears :—

" Tactics papers showed the need of continual practice in applying the principles of Field Service Regulations to practical problems ".

These remarks apply in an even greater degree to those tests which are carried out on the ground, and nothing but sound training and perpetual repetition *on the ground* will overcome this source of failure.

(*b*). It has already been stated that the second main cause of trouble is due to lack of guidance and instruction prior to the examination. This may, or may not, be largely due to the candidate himself. Young officers are apt to refrain from asking their seniors for assistance, for reasons which are obvious to all. This should not, however, prevent senior officers from volunteering their help.

" It is the duty of senior officers with their greater knowledge and wider experience to encourage and guide their juniors in their individual studies ". (*Training and Manœuvre Regulations* 1923, *Ch.* 2, *Sec.* 8 (4).)

Again, King's Regulations 1928, para. 78 state :—

" A. C. O. is responsible for the systematic and efficient instruction of officers under his command in all professional duties, and for their due preparation for examinations for promotion..... "

There is no need to enlarge further upon this matter as the extracts from the regulations speak for themselves and clearly indicate responsibility.

There are some to whom the method of examination comes as a total surprise. They do not appear to realise that the old slow system of long-winded written answers with, more or less, unlimited time, is a thing of the past; and that quick and definite verbal answers are now required by the examiners.

Unlike the written papers, the authorities do not publish any reports upon these practical tests. The reports upon the written examinations contain specimen papers together with helpful remarks and criticisms on the candidates' work and are certainly of enormous assistance to future candidates. It will be understood, therefore, that officers working for the practical, as opposed to the written examinations, do so somewhat in the dark.

It is put forward as a suggestion that some form of circular, compiled from reports and remarks made by Examining Boards each year, in which attention would be drawn to prevalent faults, etc., committed in practical examinations, would be extremely useful to prospective candidates. The correct interpretation, as portrayed in the training manuals, could be indicated in this annual summary. It is a well known fact that a large number of officers patronise the "Crammer," chiefly because they do not know how to set about tackling an examination and require someone to put them on the right lines. In other words to teach them how to work systematically. In these days of financial stringency the "Crammer" is an expensive and quite unnecessary luxury. Any officer of average intelligence and possessing sufficient determination can quite easily dispense with his services.

(*c*). Finally, there is the individual who is responsible for his own defeat. Reference is made to those who approach the examination in a casual, apathetic and half-hearted manner. The candidate who considers that little or no previous study is necessary to defeat the examiners and who takes only sufficient interest to enable him to attain the minimum marks required to pass. This type of person is, happily, in the minority and the Army of to-day can well afford to lose him.

For some time to come, for economic reasons, "Quality not quantity" will have to be the Army's slogan. It will be necessary to make up for loss in numbers by increased efficiency in our officers.

An endeavour has been made above to outline briefly some of the reasons for failure in these examinations. The possible remedies will now be considered.

At a time like the present, when the Army is slowly but surely recovering from the effects of a great war, candidates will be well advised to present themselves for examination at the earliest possible opportunity. It is a mistake to put off the evil day in the hope that examinations will become easier or, perhaps, be abolished altogether. On the contrary, one is justified in assuming that, as the standard of military education and training improves year by year, there will be a tendency to increase the standard of efficiency required from officers.

Practical examinations are now held twice yearly, generally in the spring and late summer, in all Commands at home and abroad.

The first thing, therefore, is to decide when to take the examination.

As the winter months are set apart for the individual training of officers and men, this period should prove most suitable to the majority of officers for preparation for the written papers. Normally, the individual training season is one of progressive revision, it is, therefore, a time when the candidate can brush up his elementary knowledge and this forms a useful foundation upon which to build up a sound system of study in the required subjects

On the other hand, the collective training season presents the best opportunity for working for practical subjects, *i. e.*, (*a*) and (*c*) examination. Since the bulk of the training and instruction is taking place out of doors and on the training areas.

The next point to bear in mind is that sufficient time must be allowed in which to reach the standard of efficiency required in all subjects.

Individuals vary to a great extent in their aptitude for examinations. The length of time required for preparation must, therefore, be dependent upon the capabilites of each person.

From two to three months will, normally, be found to be sufficient.

How should the candidate set about his work?

To obtain the best results and in order not to waste time by unnecessary repetition, the candidate is recommended to work upon systematic lines. The importance of working methodically and with a definite object in view cannot be overstated.

For this purpose the following suggestions, which are not exhaustive, are put forward as a guide :—

(1). Commence by reading paras. 850—863 and Appendix X, of King's Regulations, 1928. These give in detail all the information available in regard to the carrying out of the examination.

(2). Study the Syllabus thoroughly. The syllabus indicates to the candidate what he will be required to know and the forces with which he will be called upon to deal.

(3). Digest the advice given upon "Individual Training" which is contained in the Training and Manœuvre Regulations.

(4). For easy reference write down on the first page of a note book the various headings of the subjects which are to be studied, together with the books of reference required.

For example :—

SUBJECT.		BOOKS.
Tactical Training.	Protection.	Field Service Regulations, Vol. 2, 1929.
	Attack	Infantry Training, Vol. 2, 1931.
	Defence	Section Leading in attack and defence.
	Co-operation of all arms.	Notes on elementary Tactical Training.
		Artillery Training.
		Cavalry Training.
		Tank Training.
		Training and Manœuvre Regulations.
Weapons		Small Arms Training.
		Machine Gun Training (S. A. T. Vol. 3, 1931).
		Tank Training.
		Artillery Training.
Map Reading		Manual of Map Reading and Field Sketching.
Field Works		Manual of Field Works.

SUBJECT.	BOOKS.
Military Hygiene	.. Manual of Military Hygiene. Manual of Military Sanitation.
Administration	.. Field Service Regulations, Vol, 1. 1930.
General Information	.. Field Service Pocket Book.
*Military History**	.. Selected works on the Great War 1914—18. Henderson's Stonewall Jackson, etc., etc.

(5). To organise the work systematically, divide the period of preparation into stages and make out a rough programme as a guide. This programme should be adhered to as far as possible otherwise continuity becomes broken and precious time will be wasted in unnecessary repetition. Moreover, there is the danger that important points may thus be overlooked.

For instance, it will be assumed that the candidate has allowed himself two months for the purpose.

The programme when roughed out will be something like this :—

PERIOD.	WORK.	REMARKS.
1*st Fortnight*	Read up training manuals. Make notes.	.. To get a general grasp of the subjects required.
2*nd Fortnight.*	Read in detail selected subjects. Work out small schemes on sand table. Work out short schemes on paper. Make notes.	.. Do not try to learn too many lessons at a time. Work subject by subject, *e.g.*, Read up Protection, then work out scheme on "Outposts." etc., etc.
3*rd Fortnight*..	Outdoor schemes on ground with assistance. Practice message writing. Short operation orders. Map reading and use of compass on ground.	Get C. O. or senior officer to set scheme, work out on ground with criticisms. Ask Signal Officer and Adjutant to help. Get p. s. c. or experienced officer to check. Ask experienced officer to train you in this.

* See list of books recommended and issued by the War Office with reference to study for examinations.
The above is only an outline and other books can be added as desired.

PERIOD.	WORK.	REMARKS.
4th Fortnight	Continue schemes with quick decisive answers. Revise notes. Get C. O. to test if fit to be examined. *Note your weak points.*	Include co-operation of all arms. Bring in Administrative, Hygienic and Supply questions.

(6). T. E. W. T's, visits and attachments to other arms are all excellent training for practical examinations. The candidate is also recommended to attend lectures and demonstrations which bear on the subjects under consideration.

(7). The following general hints may also prove useful. Work out in detail the establishment, equipment, armament and transport of the arms of the service with which you will have to deal.

A working knowledge of the characteristics of the different arms is essential.

Work out the system of supply of rations and ammunition in the field and of the evacuation of the sick and wounded. These are best shown by diagrams for instructional purposes.

Bear in mind that most of the undermentioned points are certain to arise during the course of the examination :—

Reconnaissance. (Personal and by Patrols.).
Protection on the move.
Attack, not on a large scale, but in order to bring out the action of small units, under varying circumstances. (*e.g.*) Companies, platoons, sections. Batteries, squadrons, troops, sections of Tanks and Armoured cars. Machine gun platoons.
Exploitation of success.
Message writing and simple operation orders, both verbal and written.
Communications.
Supply.
Billets, including Sanitation and Hygiene.
Defence, company and platoon areas, section posts.
Consolidation.

Field works, siting of trenches and obstacles.

Map reading, locating points, use of prismatic compass, use of reference points.

Remember that aircraft, armoured fighting vehicles, wireless, light artillery, smoke, gas and mechanised artillery must not be omitted when considering the battle of the future.

(8). Finally, on the day of the examination, study the scheme, map and ground very carefully.

Interpret the questions intelligently and give quick and clear concise answers.

Especially have a sound reason for every action you take and, most important of all, try to *apply* your book knowledge to the problems in a *common sense manner*.

The old saying—"He who hesitates is lost" still holds good on the modern battle-fields of to-day, it applies equally well to practical examinations for promotion.

WHO WAS THACKERAY'S MAJOR GAHAGAN ?

By Colonel E. B. Maunsell.

The originals of Thackeray's characters are always a matter of interest, and that of the very overdrawn personage—Major Gahagan—is no exception. A country like India will always produce wonderful personalities, though, unfortunately for the gaiety of nations, the now widely spread knowledge of the sub-continent causes them to become rarer and rarer. Many books harp on the yarns told by old Anglo-Indians, and Gahagan may, of course, have been merely a skit on the breed in general. If, however, we look into the lives of certain Indian officers we can discern a distinct resemblance between Gahagan and a certain adventurer officer, Gardner of Gardner's Horse, now the 2nd Bengal Lancers. Thackeray's swashbuckling major repeatedly refers to " one eyed Holkar," meaning Jeswant Rao Holkar of Indore, one of the most bitter enemies with whom the British have had to cope in India, and Gardner was, for some years, in his service. He was the son of an Irish officer of the 16th Foot, and his mother a New York lady. He was born in 1770, before the trouble with the American colonies broke out, and received his earlier education in France, and not, as most officers of his day, at the nearest grammar school. Certain of his idiosyncrasies, we may assume, were due to a combination of these facts. He was granted an ensigncy in the 89th Foot in 1783, at the advanced age of thirteen, but the regiment was disbanded the same year and he remained on half pay for the next six years, when he was appointed to the 74th Foot.

The 74th were in India and Gardner did not join them, but was transferred from corps to corps until 1794, when he joined the 30th Foot. Part of this regiment was on board H. M. S. Terrible in Admiral Hotham's action in March 1794 in the Mediterranean and Gardner was present with it. In 1795, however, he took part in the more serious operations of Quiberon Bay, one of those abominably mismanaged affairs in which the British politicians persist in dabbling, and here he came into contact with Lord Moira, afterwards better known as the Marquis of Hastings, Governor-General of India. Writing of the affair in 1814, when news had reached Gardner that Hastings

was about to make war with the Gurkhas, he states " The business made a great stir at the time, but His Lordship was strenuously defended .....and the constant attendance I gave him at the time, the strong expressions he then favoured me with, and the offer he made me to accompany him to La Vendée—he cannot have forgotten these things." Gardner was anxious to obtain employment in the campaign, but Hastings does not appear to have placed much stress on his service of twenty years previously. We see, indeed, a germ of Bill Adams and the Battle of Waterloo in the statement.

In 1796 Gardener went on half pay. In other words, he retired from the service, and, according to his own account, went to Alexandria and thence to India. In some quarters it is stated that he joined his regiment in India and then retired, but this is uncertain.

A feature which will strike the reader as curious is that Gardner had served in no fewer than five different units between 1789 and 1796, a fact which tends to indicate something unusual in an officer, and his going on half pay in the midst of a great war adds to the impression. The tone of certain of his letters and observations in later life indicate that he had not been too happy. He had a kink. In the regular service, we must remember, anything savouring of the flamboyant or the theatrical is strictly taboo, and ridicule will soon cure any trend to the marvellous. In other words, what in certain circles is described as a brilliant imagination soon becomes stifled—certain present day " students of war " and similar heroes attribute this to " the military mind." The cult of the tremendous demands freedom of thought and this is only obtainable in some irregular service, and the irregular horse in particular, for here the swashbuckler flourishes both among the officers and among the rank and file—and, to do them justice, when it comes to the pinch they are none the worse soldiers for it. Gardner, in strict point of fact, was an extremely quiet, gentlemanly man, much liked by those who really got to know him, but he may have taken some knowing. His kink lay in his capacity for the marvellous, and there seems but little doubt but that his idiosyncrasy was well known in India, though Keene attempts to defend him from being Gahagan's original.

The state of affairs in India in the late eighteenth century made the country the paradise for the adventurer. The Moghul Empire was in decay, and everywhere new principalities, based

on the stout heart and the strong arm, were arising from the chaos. No native chief was held of account unless he had Europeans to lead and train his troops. It is not too much to say, indeed, that without Europeans to do so he stood a very good chance of sinking to be a mere vassal. Under such conditions Europeans had risen to positions almost princely in their nature, and, in Hindustan, a Frenchman, Perron, was actually the ruler of the Doab, with the blind puppet Moghul in his charge, and with an army of 35,000 men, officered by Europeans, who included a number of British and British half-caste officers. This Perron was, in mild theory, the servant of Scindhia, the Mahratta. In the Deccan a certain Monsieur Raymond had attained much the same position under the Nizam of Hyderabad. Officers, both King's and of the Honourable Company, who had come to grief, either through their own misdemeanours or by bad luck, found salvation in such employment and among these was one Smith, who had fought under Abercromby in Egypt in the 36th Foot. This officer had a brother, also an adventurer, and it was due to this brother that we learn so much of adventurers in general, and of Gardner among them. In 1796, in so far as the British dominions in India were concerned, there was a period of peace, though the Company's officers were restive at the unfair conditions of their service as compared with the King's. Gardner may have been affected with this restlessness, or, like many of his type, may have found the discipline of the regular service irksome. Whatever the case, he decided to become an adventurer.

The service in India which held a prestige second only to that of the Honourable Company was that of Perron. This Perron's predecessor, the great Savoyard, de Boigne, had been careful to recruit his officers from every race in Europe, and British half-castes, the sons of British officers, formed nearly half the cadre. In 1796, however, there were signs that Perron was about to favour his own countrymen and oust the British from the more senior commands. This became more and more apparent as time passed. In the Deccan, under Raymond, only French officers could obtain service.

Gardner, accordingly, decided to try elsewhere and succeeded in obtaining employment under the Holkars of Indore, a state

at that juncture well administered by the wife of the reigning Holkar. This chief was succeeded by Jeswant Rao Holkar, a brave but ferocious ruler. Hence all sorts of trouble arose and the real adventures of Gardner commenced. War soon broke out with Scindhia and many bloody battles took place, in one of which, fought near Ujein in 1801, no fewer than eight out of twelve European officers on Scindhia's side were killed. The heads of these unfortunate men were cut off and carried to Holkar, who rewarded this piece of atrocious mutilation by giving the bringers a sum of Rs. 1,000 each. Three of these victims were the sons of officers in the Company's service, probably by native women, for it is extremely hard to say where the half-caste began and the pure white ended, for all, or nearly all, except James Skinner, called themselves European.

Gardner, an English gentleman, must, indeed have been edified at this act. Nonetheless, in common with sundry other British officers, he remained on in Holkar's service.

About this period Gardner was despatched on a diplomatic mission to the Nawab of Cambay. Here occurred a romantic incident. The flamboyant manner in which Gardner described it to Lady Fanny Parkes is worthy of repetition. " During one of the durbars at which I was present, a curtain was gently pulled aside and I saw, as I thought, the most beautiful eyes in the world. It was impossible to think of the Treaty ; those bright and piercing glances, those beautiful black eyes completely bewildered me. I felt flattered that a creature so lovely as she of those deep black, loving eyes should venture to gaze upon me. To what danger might not the veiled beauty be exposed should the movement of the purdah be seen by any of those present at the durbar ? On quitting the assembly I discovered that the black-eyed beauty was the daughter of the Prince. At the next durbar my anxiety and agitation were extreme to behold again the bright eyes that haunted my dreams. The curtain was gently waved and my fate was decided. I demanded the princess in marriage. Her relations were at first indignant and then positively refused my proposal. However the ambassador was considered too influential a person to have a request denied and the hand of the young princess was promised. The preparations for the marriage were

carried forward. " Remember " said I, " it will be useless to deceive me. I shall know those eyes again, nor will I marry any other." On the day of the marriage, I raised the veil from the countenance of the bride and in the mirror placed between us in accordance with the Mussulman wedding ceremony, I beheld the bright eyes that had bewildered me. I smiled. The young Begum smiled too. She was only thirteen years old when she was married, an event which probably saved both our lives."

When we remember that the officers of Gardner's day were far less well-read than those of the present, that their speech was far more direct, and that a " literary gent " or one of the type, was regarded very much askance, what wonder that the mere style of the narration did not excite ridicule ? In what circle of officers of the present day would not the same thing happen ? We know of one or two characters, both serving and retired, who are given to a certain flamboyancy, but how many men take them seriously ?

In 1803 the great war between the British and the Mahratta Confederacy broke out, and this included the battles of Assaye, Delhi and Laswari. In its early phases Holkar held aloof, watching, with peculiar satisfaction, the routing of his brother chiefs, Scindhia and the Raja of Berar. Holkar, according to Gardner's account, decided to despatch him to negotiate with Lake, the Commander-in-Chief.

The negotiations, whatever they were, proved abortive, and Gardner returned empty-handed. It is significant, in this connection, to note that not one word of this attempted *rapprochment* appears in either Lake's or Wellesley's despatches, and these go into the dealings with Holkar prior to war with him breaking out, in great detail. No mention is made, even, of any visit to Lake's camp on the part of Gardner by any officer in the army. We are reluctantly compelled to believe that Gardner's diplomatic mission existed only in his imagination. About the end of 1803, however, things in Holkar's camp were becoming unpleasant, and Gardner, on visiting the chief after a short period of absence, was insulted by him. Holkar was sitting on the floor," propped up with cushions and more or less

intoxicated—his constant custom of an afternoon." After upbraiding him, Holkar wound up with an assurance that, had not Gardner returned when he did, he would have thrown down the wall of his private tent, in other words, he would have violated the sanctity of the zenana. Now prudence is but seldom strong in a European provoked by an Asiatic, and Gardner's case was no exception, for the insult was a deadly one.

" Drawing my sword " he afterwards used to relate (we can almost picture Gahagan holding forth on such a point) " I attempted to cut Holkar down, but was prevented by those around him. Ere they had time to recover from their amazement I rushed from the tent, sprang upon my horse, and was soon out of reach of pursuit.

In Gardner's account of the adventures and perils that followed we can almost recognise the great Gahagan.

In his flight he fell into the hands of Amrit Rao, the Peshwa's intriguing brother. The Peshwa, in theory the senior chief of the Mahratta Confederacy, was supposed to be the ally of the British, and of Arthur Wellesley in particular. Amrit Rao invited Gardner to take up arms against the English, who, it would appear, had just routed the armies of Scindhia and the Berar raja at Assaye. Gardner was lashed to a charpoy. The " colonel " remained staunch and, in the hope of wearing him out, his execution was suspended and he was placed under a guard. Walking one day by a steep cliff, which led by a precipitous descent to the Tapti, Gardner was suddenly inspired to make a dash for liberty. Crying out " Bismillah " (Gahagan went one better and said, " Bismillah, bobarchi bahadur", which, being interpreted, means " May the peace of Allah rest upon you, O cook of much courage ") he leapt down a precipice fifty feet high, and made for the river.

He plunged in and, taking cover in some friendly jungle, remained in the water with only his mouth above the surface. He then assumed the disguise of a grass-cutter—or says he did, for of all unlikely disguises to pass muster in Central India, that of a grass-cutter is the most unlikely. The fraternity are of miserable physique, wear but few clothes and are as unlike a

European as it is possible to be. Gardner, on the other hand, was exceptionally tall and well proportioned.

In this marvellous disguise Gardner tells us that he succeeded in finally reaching Lord Lake's army. Now the distance from the Tapti to near Agra, where Lake was at this period, is some four hundred and fifty miles. Arthur Wellesley, on the other hand, was barely one hundred miles off and had just routed Scindhia and Berar at Assaye and Argaum. Furthermore, we learn from the Wellington Despatches that quite a number of adventurers had succeeded in joining him. As to why our hero did not attempt to join Wellesley is, therefore, not quite clear. As, however, he says he was successful, we must leave it at that and assume that the swarms of banditti who ravaged the whole intervening country were bluffed into letting this simulated grass-cutter pass unmolested—a marvellous feat of itself.

In Lake's letters and despatches no mention is made of Gardner joining him, though in them we have the names of very many adventurers. The first mention of his name occurs when we find him in the service of Jeypur, who, consequent on the victories of Assaye and Laswari, had just become the ally of the British.

By now, Holkar had become definitely hostile, and war broke out with the British. The prelude to this had been the murder of the whole of his British, or British half-caste, officers—for most were of this last category. In accordance with the custom of this savage, their heads were stuck on pikes and paraded round the camp.

Lake advanced with the Grand Army from the north and Holkar fell back before him. The hot season being at hand and Holkar showing no signs of doing much damage at that juncture, Lake determined to watch him with a detachment and bring the main army back to cantonments, for his white troops were suffering greatly from the heat.

The detachment was commanded by a singularly brave, but most astoundingly incompetent officer, Colonel Monson, of the 76th Foot, and comprised, besides the Company's regular sepoys, sundry bodies of irregular horse, some in the Company's pay, others in the pay of native chiefs.

Among the latter was a corps commanded by Gardner.

Co-operating with Gardner was another British officer, also in command of some irregular horse, one Lucan by name, and one of the most valiant of all this valiant band of free-lances. Lucan had come into Lake's camp from the Mahratta service the evening before the storm of Aligarh the previous year. Thanks to his advice and guidance, in very large measure, the fall of the fortress was brought about, and first and foremost among the stormers was to be seen this indomitable man. Such was his gallantry on this occasion that Lake gave him a commission in the 74th Foot; to grant a commission in the King's service, as distinct from that of the Honourable Company, was an honour indeed. It will be recalled that the great Gahagan performed marvels at this storm. Gardner, having been thrown into close association with Lucan, would have heard the details first hand—and we have heard of folk having their brains picked.

The two officers combined, and "bit on Holkar's tail"; in other words they succeeded in inducing two battalions and eleven guns to surrender. The "fight" was extremely bloodless and, between the lines, it looked very much as though the enemy was only too glad to have done with war, for pay in Holkar's service was non-existent and the country had been so thoroughly ravaged by constant war that no plunder was obtainable. Whatever the circumstances, there is no doubt but that both Gardner and Lucan did good work. It is amusing to note that, when an account of this operation was given in the official gazette, some cynic, writing to the Calcutta Journal, cast doubts on the whole affair—possibly Gardner's fame had already spread. Writing from Saugor in 1820, that is sixteen years after, Gardner states "Have you seen Major Thorn's Lake's War? I got hold of it this morning—lame enough, and in many instances incorrect, but I found an Account of my cutting up Holkar's rear, and taking two battalions and eleven guns (he says three battalions) and otherwise mangles it, but calls it a well managed business. 'Twas this that some fellow doubted in the Calcutta Journal, but as it was on public record I did not think it worth while contradicting."

At the time this action took place, Lake's army was well on its march back to cantonments and both Gardner and Lucan

were away by themselves. Faking despatches under such circumstances is not unknown, though there is no reason to suppose that it was done in this case.

In mid-July, 1804, Holkar suddenly advanced on Monson. This officer, one of the bravest of the brave in battle, was one of those who, when faced with responsibility in isolated situations becomes timid and pusillanimous. In lieu of offering battle as his very able subordinates and as both Lake and Wellesley deemed he should have, he decided to fall back, to his ultimate ruin. Where Gardner was at this juncture is not known. His name does not appear in either the official reports or in the journal of Colonel Don, an officer who was now to become prominent for ability and drive. James Skinner, then in command of his famous " Yellow Boys " under Lake—the regiment now known as the First Bengal Lancers—evidently disliked Gardner, and the dislike was mutual. He imputes that Gardner kept out of the earlier fighting and left Monson in the lurch. Whatever the case, Lucan with his irregular horse, together with certain horse sent by the Rajput chiefs friendly to the British, were overwhelmed in the first encounter, and poor Lucan was foully done to death by Holkar at Kotah.

Monson, falling back through country completely inundated with the monsoon rains, lost half his force through hardship and exposure, but expected help from the Jeypore raja when he reached a fort called Rampura, now known as Aligarh, and Gardner's name is mentioned in this connection in Don's journal. It was stated therein that Gardner was within a few miles of Rampura, though this may have been merely a guess.

The Jeypore raja, by now, was thoroughly overawed by Holkar's advance and, doubtless for this reason, no help, in so far as military assistance was concerned, reached the British commander. Gardner's explanation of events was given, in March 1805, to a young officer of the 15th Native Infantry who had just been wounded at the Third Assault at Bhurtpore. He was then in command of a body of irregulars in the Company's service at Agra. The explanation capped all previous records of marvellous adventure and, though believed by the young officer at the time, for it was given in a most serious manner, would appear to

have got about the army in general. The yarn went that when Holkar first fell on Monson, Gardner found himself cut off, a very probable explanation. The only recourse was to order his men to disperse and find their own way back as best they could. With irregular horse this usually meant that the corps would disperse towards, and remain with, the enemy, who were all of the same race, until the moment seemed propitious for rejoining what they deemed was the winning side. Gardner, with a few men appears to have got back to Jeypore in safety, but what he did when Monson was at Rampura is not known, although the latter was there for three weeks. Anyhow, on the approach of Holkar, the Jeypore raja, now in a state of terror, approached the British Resident, a Captain Sturrock, and told him that Holkar had demanded that a certain European should be handed over to him.

For some wonderful reason, the British Resident was not included in Holkar's demand. A few days later Sturrock was approached by a number of Mussulmans, who asked him if he would mind if they buried one of their number in the corner of the enclosure surrounding the mausoleum in which he was then residing—it was a common practice for Europeans to live in such edifices in default of bungalows. Sturrock assented, after much demur, for the ground was known to be consecrated. When the funeral procession arrived, Sturrock was surprised to see that it did not move directly towards the grave, but went to the door where he was standing. The body was covered with a white sheet, ornamented with flowers, as was the Patan fashion. To his astonishment, the dead man arose, and revealed himself as Gardner, almost as pale and emaciated as a corpse. When we recall the marvellous escape as a grass-cutter the complicated arrangements in masquerading as a corpse would appear somewhat overdoing it.

With regard to the tremendous adventures of Gahagan at Futtygarh, there is every ground for supposing that Gardner was really there when Holkar attacked. He would appear to have rejoined the British about September, 1804, after the escape described above. Futtygarh was then full of depots of corps in the field and Gardner was, in all likelihood, in the process of raising the irregular horse which he commanded when the subaltern of the 15th met him in March 1805. Holkar attacked in

November, 1804, hotly pursued by Lake, with the cavalry. We do not know the names of the officers shut up in the fort, together with the beautiful Belinda Bulcher, the Macans and the other fairies confided to the charge of our friend Gahagan, but it is a curious fact that there may, in very truth, have been a Mrs. Macan, with certain Miss Macans, for Futtygarh was the depot station of the 4th Native Cavalry commanded by Macan, one of the finest and ablest of Lake's many excellent officers. This regiment, like the whole of the rest of the Bengal regular cavalry, with the sole exception of the Governor-General's Bodyguard, disappeared in the maelstorm of 1857.

We now come to probably the most important link in our story. When Lake reached Futtygarh he was accompanied by a young Engineer officer, Carmichael Smyth. This officer was surveying the routes and his map can now be seen in the India Office. Smyth was no other than step-father to William Makepeace Thackeray, and a man much beloved of the writer. It is quite on the cards that Smyth and Gardner both met—they were both of a sociable nature—and Gardner's yarns may have excited interest.

That Thackeray drew largely on Smyth's characteristics in depicting the character of the immortal Colonel Newcome is undoubted, and it is to be noted that Gahagan is not in any way regarded in the light of a vicious liar. We can almost picture the old Colonel commenting on him as " a really ridiculous perverter of the truth."

To give a further example of Gardner's capacity to exaggerate we may quote the following. There had been some discussion of equestrian feats and skill at arms displayed by Skinner's corps. Gardner, then staying at Lucknow with the King of Oudh, breaks in with " An old servant of mine is now in Lucknow. He is in the King's service (meaning the King of Oudh). He is the finest horseman in India. I gave that man Rs. 150 a month (in those days the best part of £200 a year) merely for the pleasure of seeing him ride. That man could cut his way through thousands. All men who know anything of native horsemanship know that man."

A tactless individual asked him to produce this paragon, Gardner was apparently somewhat non-plussed, but got out of

the dilemma with the lame explanation "The man has informed me that he would willingly give a display but such is the jealousy with which he is surrounded that he dare not," oblivious to the fact that, in India, there is a golden key which will open the most obstinate of locks. On the conclusion of the Mahratta War of 1803-06, the whole of the irregular corps, with the exception of a portion of Skinner's which became a form of police, were disbanded, Lord Cornwallis making the not altogether unsound observation. "He would rather fight them than pay them." Gardner's corps went with the rest. Gardner's wife, generally known as the Begum, had been adopted by the old Moghul Emperor as a daughter, and Gardner had a property assigned him at Khasganj, in the Doab, held by a firman from the old man. The lady, thanks to her position as a Princess of Cambay, had been successful in escaping from the clutches of Holkar, no mean feat, for this ruffian was no respecter of persons as a general rule and, had she been a lesser personage, would have brought a young and beautiful woman into his zenana, Mussulman though she was. On this property Gardner remained as a farmer for the next three years. In 1809 he was directed to raise another corps of irregular horse, the regiment now known as the 2nd Bengal Lancers. In 1814, possibly by chance, possibly with the intention of seeing the lie of the land in which war seemed imminent, Gardner proceeded on a sporting expedition to Dehra Dun, then held by the Gurkhas. Here he was nearly shot as a spy, and was only rescued through the intervention of a Sikh priest.

In the ensuing war with the Gurkhas the corps did useful work, forming, in the earlier phases, part of the column commanded by General Marley, the extraordinary officer who so lost his nerve at the unexpected resistance that he actually deserted—Fortescue makes the charitable comment that he was probably insane. Gardner's brother-in-law, Hearsey, in these operations carried out a brilliant stroke with a squadron of the regiment—about the only redeeming feature of these abominably mismanaged operations. Another Hearsey, the future Sir John, of Sitabaldi, Chillianwallah and Mutiny fame, also served with the corps at this period and finally took over command when Gardner left the service in 1828. In 1817 the corps was honoured by being incorporated in the Company's army, for its previous status had

been anomalous. Gardner was rewarded by a brevet majority, dated back to September 25th, 1803, two days after Assaye, this being the day he quitted Holkar's service. This appears in the Army List of 1818.

His last campaign was in Arracan, though he was then almost too weak to sit his horse. His high spirit showed itself to such a marked degree that his corps, though irregular, had fewer desertions than any other which took part, for the campaign was abominably conducted and the unfortunate troops died like flies.

We learn much from Lady Fanny Parke of Gardner's domestic life, and this is of great interest. His Begum was a lady of distinction who lived the usual zenana life surrounded by younger ladies, princesses of Delhi and other leading aristocrats. These secluded woman led extremely dull lives, occasionally varied by acute quarrels. She witnessed the wedding of one of the girls to a scion of the Imperial House of Delhi, and she gives an account of the ceremonies, evidently survivals of the old desert life of the Mongols, from whom the Moghuls are sprung. One was that the bridegroom had to come to the house and carry the bride off with a show of force. This was explained by Gardner. "It is the old Tartar custom for the bridegroom to fight for his bride, and carry her away "vi et armis"; this is still retained." "The Begum would not omit a Timurian custom for the world." The other singularity—at first sight not very intelligible—was that the husband, after getting his wife and carrying her home, bade her put her foot through the litter, and touched her toe with the blood of a goat which he slaughtered for the purpose. The practice is said to be peculiar to the House of Timurlane, the Tartar.

The wife of his youth continued to be dear to the advancing years of the old adventurer, with one singular result, that all his offspring were married to natives of India, and have adopted the native life. It is not a case of their being members of the Eurasian community. One of Gardner's sons married a granddaughter of the old Mogñul, Shah Alam, and his descendants had what was probably the most remarkable geneaological tree in the British Empire, for one, although a native of India in every respect, inhereted the title of Lord Gardner from the Irish peer of 1800.

The last Lord Gardner was his grandson ; and of this nobleman Debrett gives us the following description:—

> Alan Hyde, born July 1st, 1836 ; sometime in the native police force ; described in marriage certificate as " A trader "; married March 12th, 1879 by a Methodist Minister in the house of his father to Jane daughter of Angam Shekoh, and has issue living, Alan Legge born October 25th, 1881. Residence, Village of Munowta, Nadri, Etah, N.-W. Provinces, India."

This Lady Gardner was the grandchild of the last King of Delhi, in whom terminated the line of Timurlane the Tartar, known as the " Great Moghul."

Gardner died in 1835, followed in less than a month by his faithful and broken-hearted Begum. He was buried in a very handsome marble mausoleum at Khasganj, Thus ended the career of an adventurer whose descendants are connected with the English peerage, the house of Timur, the kings of Oudh and the Begs of Cambay.

LETTERS TO THE EDITOR.

MOBILITY.

SIR,

I trust that I shall not over-tax the patience of your readers if I add a few remarks on the above subject, "*àpropose* of the interesting letter of P. B. I contained in your April 1932 number.

This letter states that "as a general rule, Officers serving with the Irregular Forces on the Frontier, look upon Regulars as ponderous and immobile, and unsuited at ordinary times to mountain warfare, against the agile and wily Pathan."

This statement is rather astounding, and especially so if one considers recent Frontier History. A study of this will show that of recent years heavy fighting on the Frontier has only occurred in 1897, 1901, 1908 (Mohmund) and 1919/20. Now, in dealing with Tribesmen, when once operations start, it is only by hard fighting, involving considerable casualties on both sides, that any permanent effect is gained. The expeditions mentioned, were carried to a successful issue entirely by the "ponderous and unsuitable" Regulars.

The heavy fighting in Waziristan in 1919/20 had an enormous influence over the Mahsuds which they have never forgotten ; it killed off all their young fighting stock. In 1930, the heavy losses inflicted on the Mahsuds by a concentration of modern machine gun fire such as they had never before experienced, was the decisive factor in causing them immediately to come to terms.

From the writer's recent experiences of Regulars and Irregulars in the Field, he is convinced that the Regular Infantry of to-day is every bit as well suited to tackle the wily Pathan as he was in the past, provided the situation is duly appreciated. The Khajuri Plain operations in 1931 proved this. They are the same troops, only better trained, as those who fought so magnificently in the Great War. Experience will prove whether their present armament is suitable for mountain warfare : it may be necessary at times to modify this locally, to suit the situation. Similarly it is generally agreed that the new organisation is not so well suited to the individual work of mountain warfare as was the for mer. But we must make the best of this : each tiny corner of the Empire cannot have its own specialised organisation and troops.

There is always a danger in India of thinking only in terms of the N.-W. Frontier and of peace time patrol work and police duties on it. There is also a tendency during a prolonged peace to overlook the necessity of Fighting Power and to sacrifice everything to Mobility. It is certainly a platitude but one nevertheless apt to be forgotten, that the object for which Regulars are organised and trained is "To Fight". No amount of running over the hills, no amount of "*gushts*" will win a campaign. Police work is often the unpleasant task of the Army in India but it is not its proper rôle.

When considering the reduction of arms, equipment and transport with a view to gaining more mobility, it is suggested that Fighting Power should always be the governing factor. Fifty rounds of ammunition go nowhere in a real fight. The heavy casualties sustained at Ahnai Tangi in Waziristan in 1919 were largely due to the fact that ammunition ran out and some of the troops had to fight with stones—a horrible situation.

By all means however let us give every thought to the ability to move and to move fast and far. In the writer's opinion, the main and paramount factor towards securing Mobility is the Will to Move.

This is ensured mainly by the Training of the Troops, and by the Leadership of all Commanders.

Yours faithfully,

3rd June 1932.

"*Light Infantry.*"

THE BURMESE REBELLION, 1931.

SIR,

As an officer of the Burma Military Police, I would be very grateful if you could publish corrections to a number of inaccuracies which appeared in an article "The Burmese Rebellion, 1931" published in your April Number.

The first occurs in the section dealing with the course of the rebellion, in which it is stated that available armed civil forces were two

battalions of Military Police. This the entirely wrong, as there were no battalions as such at the disposal of the Civil authorities.

In December 1930, the Military Police consisted of six frontier battalions, two garrison battalions, and a reserve battalion. The rebellion broke out in the area garrisoned by the Rangoon Battalion, but that battalion could scarcely be considered as available for rebellion duty, as it furnished the men in posts stretching from Mergui in the south to Paletwa on the Chittagong border, a distance of approximately 800 miles. The only men available from the Military Police, were detachments found by reducing the Headquarters strengths of all battalions in the force.

It is also added that by June 1931 five new battalions of Military Police had been raised and five others were in process of being recruited. This is very greatly exaggerated, for battalions one should read companies.

Your correspondent states that no Military Police were available for Tharrawaddy at the outbreak of the rebellion in December 1930. This is incorrect as Military Police were sent there and were in action on December 25th. before the arrival of the Military, and on January 1st. there were 420 rifles of the force in Tharrawaddy.

There are several geographical errors in the "Sketch map of Burma." Okkan shown on the Mandalay line about 20 miles North of Nyaunglebin, is in actual fact on the Prome line, 12 miles South of Tharrawaddy.

Thayetmyo shown as being on the Eastern side of the Pegu Yomas in Toungoo district, is on the right bank of the Irrawaddy about 60 miles West, and is about the spot where Allanmyo has been marked. Allanmyo is on the left bank of the river, and not the right.

I think too that most of those who operated during the rains in Thayetmyo district would have no hesitation whatever in saying that the Southern limit of the dry zone should be moved about 80 miles further North.

Yours faithfully,

Rangoon. J. F. BOWERMAN, CAPTAIN.

Editor's Note.

The author of the article " The Burmese Rebellion, 1931 " comments on the above letter as follows :—

(*a*) *Available Military Police.*—The article did not infer that two battalions of Military Police were available " as battalions " ; on the contrary it specifically stated that the two battalions were dispersed " among numerous stations," and that " this dispersion was a serious handicap to the Civil Authorities who experienced great difficulty in concentrating sufficient armed forces in any particular area."

(*b*) *Raising of New Companies of Military Police.*—It is very much regretted that by a slip of the pen the word " battalions " was used instead of " companies."

(*c*) *Military Police in Tharrawaddy.*—The article did not state that " no Military Police were available for Tharrawaddy at the outbreak of the rebellion." The words used were, " the Rebellion showed signs of getting out of hand. No *more* Military Police were available." This plainly means that *some* Military Police were present before the Military were requisitioned.

(*d*) *Errors in Map.*—Two of these were due to mistakes in an official map prepared in Burma ; one, to a printers mistake in reproduction. They are regretted.

Finally, the last thing that the author of the article intended was to minimise either the services of the Burma Military Police or the difficulties which confronted them.

A Sanatorium for Indian Consumptives.

Sir,

I hasten to add my plea to that of Major D. B. Mackenzie in the April number of this journal for a Sanatorium for Indian Troops.

It is pitiable indeed to see these men, who were fine, healthy-looking specimens and in their prime only three months before, stricken down by such diseases as tuberculosis and pleurisy and reduced in an incredibly short time to a miserable travesty of a human being.

"Five months to live—with luck" was the verdict on the last case to be boarded out in my own Battalion—a former long-distance runner whose times for the "three miles" and the "ten miles" still, I believe, stand as Punjab records. Could there be a more pitiable ending for a fine athlete to face than this galloping death awaiting him in his village, when expert treatment amongst healthy surroundings might result in years of extra life and health?

"Five months to live" was the verdict again in another case last week—that of a young Khattak, under 19 years of age, the picture of health only four months ago.

Have we any right to wash our hands of cases such as these and callously allow them to creep away to their homes to die?

The malady takes them young or old when vitality and powers of resistance to disease are sapped by the hardships to which they have been exposed in the service of the "Sirkar." There is not a whisper of complaint that Government treats them anything but liberally. Oriental fatalism steps in and saves the situation.

"The fate of man is writ upon his forehead at birth; that he cannot escape. Moreover, Sahib, is not twenty-two rupees a generous monthly pension for man with only two and a half years service, who can be of no further use to the Sirkar?" was the remark of his platoon commander.

Is it possible to agree with this opinion when one sees these piteous hulks being assisted by their sick attendants into the second class compartment in which they are allowed to make their last journey homewards—again by the generosity of the Government? No one can cavil at the liberality of this treatment, but even so the germ of an insidious doubt is born in one's mind. One begins to wonder whether, after all, the Sirkar's responsibility can indeed be rightly considered to have ended with the granting of a liberal pension and a free passage home.

The record of Pulmonary Tuberculosis cases invalided out of one battalion alone during the last four years is not pleasant reading. A total of 18 wrecks of what, but a short time ago, were fine upstanding specimens of their race have been sent off during that period to die in their homes as quickly as the disease, untreated and neglected, may decree. Is then the responsibility of the Government altogether over when these poor wretches have reached their villages? Further,

can one honestly say, without a twinge of conscience, that their subsequent fate need be no concern of *ours?* That though it is all very sad nothing can be done to lessen the tragedy, and that anyhow the world is full of " hard cases " which are best pushed out of one's mind—and then perhaps one quickly sidesteps from a painful subject and turns one's thoughts to polo or to that next fishing trip that we are planning for next month.

Again, take the case of that fine young P. M. who is now crawling back to his home in the Salt Range without the hope of seeing another sowing. Did he visualise the possibility of being stricken down in his prime by this malignant disease when the spirit of adventure led him into the service of the Sirkar, ready to take his chance in war but hardly prepared for this sudden death sentence in the piping times of peace Again that suspicion of a doubt creeps in to disturb one's complacency, a feeling of misgiving that perhaps one's responsibility has *not* entirely ceased with the signing of the pension papers and a muttered " *bara afsos ki bat* " as one takes one's final farewell of him at the hospital. And what of the Government? Does the sanctioning of the pension free *it* from all further obligations in the matter?

The obvious reply to this embarrassing question is that unfortunately the Government has no funds for any such object as the establishment of a Sanatorium. The matter is, however, too serious for this statement to be accepted as final. Certainly the easy course to take is to brand the idea at once as impossible and to let it die of inertia, banished to some musty file, but the raising of funds for a refuge for these human wrecks is, I submit, such a vital matter that it cannot be evaded. The problem has got to be faced—and solved.

Major Mackenzie has made some excellent suggestions regarding the raising of money from private sources. I would go further and urge that, funds or no funds, the State *cannot* be absolved from taking an active part. Let it show the way and set the necessary example with an allotment of money and an appeal for funds; let us then find some influential, philanthropic person to give the lead for private subscriptions, each one of us adding his share in spite of the cut in pay.

This is essentially a matter for the State to contend with first. Once the project has official approval and aid, public interest will be aroused and subscriptions flow in. The suggestion that an extra half lakh be appended to the Budget will doubtless cause no little dismay

in financial circles at a time when every avenue is being explored for further economies. When, however, the true object of this extra call is properly understood in the Legislative Assembly—when it is realised that the nature of the project is essentially a national one, a charity for brother-Indian and not for the foreigner, is it too much to hope that the House will recognise its responsibility sufficiently for all Parties to sink their differences and pass this new item of expenditure in spite of the " barrenness of the land " ?

There is no reason why the Army should be expected to bear the whole of this burden as it by no means holds a monopoly in the disease. The Sanatorium would be intended for patients from all Government Services, civil and military, covenanted and uncovenanted alike, and once it is established the aim should be to expand and enlarge it sufficiently to take in for treatment cases from every walk in life.

There is a pressing need for something more tangible than public charity to see it through, and the necessity of early action by the State is emphasised. May we look to it therefore to give a lead in establishing a charitable Institution which is as necessary in its way as the Leper Asylums which have existed for so many years ? The first gesture must come from the top. The movement requires the Government's official approval and support before there can be any hope of fulfilment.

This letter is written in the hope that it will catch the eye of some prominent member of Government, military or civil. Now that the matter has been aired it cannot and must not be allowed to drop back into that limbo of forgetfulness, the office pigeon-hole. That would be the convenient course to take—soothing to one's disturbed complacency, an anodyne for troublesome thoughts. Let us make certain that we do not follow it.

Yours faithfully,
O. D. BENNETT, Lt.-Col.,
2/15*th Punjab Regiment.*

MINGALADON.
8*th June* 1932.

" More or Less of a Mess."

SIR,

A mess is not necessarily expensive. Much depends on the C. O. and the Mess President. I believe that Officers of the Indian Police have died because they could not afford to take leave, and that this

was largely due to their being much on tour, when an Officer has to have a cook and other servants to himself, instead of, as in the Army, one to the whole Battalion.

As to dress, does " Economist " suggest that Officers should dine as guests with British units in ordinary evening clothes ? Or, if Field Officers of the week, turn out guards in that attire ?

I do not know when Messes were started in Indian Regiments. Sir Thomas Seaton, who was commissioned as Ensign 4th February 1823, writes of that year, in " From Cadet to Colonel," Ch. I :—

> At that time there were no messes in native regiments. Officers generally lived two or three in a bungalow, according to circumstances, and chummed together. Frequently six or more living in contiguous houses would for the time being form a little mess, and if one of the number happened to be an old officer, and a tolerable manager, it was a very agreeable and economical plan. Each officer kept his own wines and beer, and the table expenses were in common. If one of the party wished to invite a guest, timely notice was given to the manager, and a small extra charge was made. Each member of the mess sent his servant to assist in cooking the dinner, and each sent his chair, glasses, plates, knives and forks, and napkin. This was called " camp fashion." A small subscription provided dishes, cooking-vessels, and other requisites, and all the accounts were settled on pay-day.
>
> This system had the great advantage that it did not lead to such extravagance as regimental messes undoubtedly do ; the officer could live as economically as he pleased, there were no public nights with their following heavy bills for wine, no mess balls and parties with their attendant extravagance, and no member of the little mess was called upon for any expense beyond that of his daily food. If any member was economising to pay for a gun or horse, some member of the mess would be sure to share with him his bottle of beer or modicum of wine, and he knew exactly what his expenses would be. Regimental messes, as managed in England, are very pleasant for young men with abundant means. I can say little else in their favour.

I quite agree that Indianisation spells the death of the Regimental Mess in India. I also agree that there is " an enormous amount of

extra work to already overworked Officers." Also I think the Mess President gets no chance. When Mess President, I was often with my Double Company on the rifle range as early as one could see to shoot, and breakfasted there, or at the Orderly Room when I got there about one o'clock. After my Double Company work I got to my bungalow about three. The Mess was three quarters of a mile further on. What chance did I get?

Chummeries have their disadvantages. So have Clubs. I remember a British Regiment who, as their landlord would not make the Mess bungalow habitable, closed it and lived at the Club. There, they had their own table and dined as a Regiment—but there were about four cases of enteric among the subalterns, one of whom died. That, I fear, would be one result of chummeries. And chummeries would soon degenerate into dining in pyjamas.

In another station, many oddments, who had no Mess, lived at the Club. It was a very rowdy place and the ex-sergeant who was Steward ran about with a note-book trying to keep account of who broke what.

But a Station Mess is an abomination. Thirty years ago, as a Double Company Commander I lived in a combined Indian Infantry Mess. The Regiments quarrelled; the place was a pot-shop; everybody's attitude was "Thank God, it's not my Regimental Mess." I gathered that preceding Regiments had been the same, with the addition that the C. O. of the one occasionally put the Officers of the other under arrest. Twenty years ago, as a C. O. I had to live in another combined Mess. Same thing—a pot-shop, and occasionally a gambling hell. I go to bed early, but at breakfast next morning cannot help hearing young Officers of the other Regiments laughing about some appalling gambling game that was played overnight.

Chummeries have their disadvantages, but Station Messes are (to my mind) far worse.

Yours faithfully,
C. A. B. P.

Oxford.

MILITARY NOTES.

AFGHANISTAN.

Internal Affairs.

" The fundamental rules of the Afghan Government," framed by the National Council, and signed by the King on 31st October, 1931, have now been published. They include several interesting features such as the composition and duties of the Upper House (Majlis-i-Aiyan), and its relation to the National Assembly ; the election of the National Assembly every three years ; its duty regarding the examination and approval of the budget, which will include an allotment for the King's expenses ; and the abolition of forced labour, except in war time. The succession to the throne is declared to be confined to the family of Nadir Shah.

AUSTRIA.

Army Estimates for 1932.

The Austrian Army Estimates, amounting to about £2,370,000 at par, show a decrease of some 25 per cent. on the 1931 Budget total. The total returns to approximately the same level as that of 1927 and brings the gradual increase, which had become a hardy annual since 1923, to an abrupt termination. The Estimates have been accepted by the Austrian Parliament in special debate in Finance and Budget Committee. It is unlikely that the figures will be subjected in the future to more than minor alterations. The total will be slightly reduced by small items of income from army shops and farms, various leased properties, swimming baths, &c.

BELGIUM.

Linguistic Law.

An interesting point has arisen which touches on the linguistic question in this country. All members of the *gendarmerie* are required to know French and Flemish. In those parts of the country far removed from Flanders, such as Luxemburg, naturally only those of

Flemish birth know that language. Thus in the really Walloon country this law has the anomalous effect of excluding any except Flemings from the *gendarmerie.*

Inventor of Mills Grenades.

During the month the British papers reported the death of Sir William Mills, who is referred to as the inventor of the Mills grenade. The Belgian press took up this point and pointed out it was an error to think that the grenade had been invented by Mills. It was stated that the bomb was actually invented by a Belgian, a Major Roland of Liége. The invention was first offered to the French and was refused by them. It was subsequently accepted by the War Office on the condition that it should be manufactured in England and Sir William, then Mr., Mills of Birmingham, was selected to manufacture it.

General Galet's Book.

During the earlier part of December a good deal of space in the press continued to be devoted to criticism of the book recently published by General Galet, the Belgian C.G.S. One effect of its publication has been that General Lantonnois van Rode has taken an action against General Galet for defamation of character. General Lantonnois van Rode was commanding the group formed by the 4th and 6th Divisions at the beginning of the War and considers that his conduct has been unjustly criticised by General Galet. He demanded a public apology and is apparently not satisfied with General Galet's reply to his demand, which was to the effect that he had misread the passages of which he complained.

Voluntary enlistment in the Belgian Army.

Owing to the large numbers of volunteers who have entered the army during recent months on a semi-permanent engagement, an order has been published forbidding any further enlistment of this sort.

This influx of volunteers is a result of the present economic crisis.

Standard of education in the Army.

Official figures of the percentage of illiterates in the army were published towards the end of January. In the year 1930, of 39,497 miliciens, 3 per cent. of the Flemings were illiterate and 1 per cent. of

the Walloons. Of the other 96 per cent., the standard of education was divided up as follows :—

Able to read only	.. ..	1 per cent.
Able to read and write only	..	8 „
Able to read, write and calculate	..	75 „
Possessing a higher standard of education		12 „

Most of the illiterates are taught to read and write during their period of service.

CZECHOSLOVAKIA.

The Czechoslovak Army.

Military obligations and periods of service.

The Defence Law of Czechoslovakia lays down that in principle the armed forces of the Republic will be restricted to a militia, but until that object can be attained the army is based on conscription.

Under the law of 19th March, 1920, military service is compulsory and general for all male citizens between 20 and 50 years of age. The period of service with the colours is at present 18 months, beginning on 1st October in the year in which the youth reaches the age of 20.

By the law of February, 1927, the annual quota of conscripts actually to be called on to serve for 18 months was fixed at 70,000. All remaining fit men in the annual contingent are enrolled in an Ersatz-Reserve, and only a portion of them are called up for a shortened period of 12 weeks' training ; subsequently they are called up for 4 weeks' " special training " and are then transferred to the ordinary reserve, and are liable to the same reservist training as the 18-months conscripts.

Reservists are liable to 4 weeks' training in each of the 3rd and 5th years of their reserve service and 3 weeks in each of the 7th and 9th years. At present, however, for reasons of economy, reservist training is being restricted to 3 weeks in all cases, and only 3 classes instead of 4 are to be called up each year.

Compulsory physical training.

A Bill has recently been introduced which makes physical training obligatory for all male citizens between the ages of 6 and 24 and for all females between 6 and 21. The training will be in charge of the military administration working through the schools and authorized institutions for physical development, and the programme will be worked out by the Ministries of Health, Education and National Defence.

Recruitment of officers and long-service other ranks.

(*a*) *Officers.*—These fall into two main categories, namely those with war service and post-war entries.

Post-war officers practically all come into the army through the Military Academy at Hranice ; a small percentage for the services are recruited from reserve officers of their respective service.

Reserve officers at present consist mainly of ex-Austro-Hungarian reserve officers. The future replenishment of the Reserve Officers' Corps is effected as follows: Conscripts with a secondary school education are sent, shortly after the commencement of their 18 months' service, to a reserve officers' school; on passing out, successful candidates may be nominated to commissions as reserve sub-lieutenants before the conclusion of their 18 months' service. Reserve officers are liable to 4 weeks' training in each of the 2nd, 4th, 6th, 8th and 10th years after their transfer to the reserve.

(*b*) *Warrant officers.*—These are recruited from long-service non-commissioned officers, from other personnel serving with the colours, or from reservists in the first 2 years of their reserve service, and must not be more than 25 years old. After a special preparatory course they are nominated to the rank of warrant officer and must serve for at least a further 4 years.

(*c*) *Long-service non-commissioned officers.*—These consist of men who, after their 18 months' conscript service, voluntarily take on for further periods of 1 year (or sometimes 6 months) at a time.

Strength of the army.

The approximate total strength of the Czechoslovak army is as follows :—

(*a*) *With the colours.*

Officers	..	10,070
Warrant officers	..	8,800
Long-service non-commissioned officers	..	4,630
18 months' conscripts— October—March, 140,000 / April—September 70,000	average..	105,000
12 weeks' conscripts	..	6,500
Total	..	135,000

(*b*) *Trained reserves.*

Under age 40	..	850,000
Ages 40 to 49	..	520,000
Total	..	1,370,000 including about 43,000 officers.

Army organization.

(*a*) *Higher command, administration and organization.*

(i) *The President of the Republic* is the supreme military commander, but delegates most of his powers to the Chief of the General Staff on the one hand and to the Minister of National Defence on the other. Each of these individuals has the right of personal access to the President.

(ii) *The Military Secretariat of the President* constitutes the means by which the President maintains contact with the army and performs certain acts which are not delegated to the Chief of the General Staff or to the Defence Minister.

(iii) *The Chief of the General Staff*, as the actual commander-in-chief of the army, is directly responsible to the President for the training and military efficiency of the forces. In all else he is subordinate to the Minister of National Defence. The General Staff is the executive organ of command within the army.

(iv) *The Minister of National Defence* has the power of the purse and through the Ministry of National Defence directs the administration of the army. As a member of the Cabinet he is responsible both to the President and to Parliament.

(v) *The Army Committee of Parliament* consists of two sub-committees, one from each house, representation on which is proportionate to the strength of the parties in Parliament. This committee forms the channel of complaint from Parliament to the Minister of Defence and all measures concerning the army are submitted by the Minister to the Committee, where they are examined and, if necessary, modified before being presented to Parliament.

(vi) *The Inspector-General of the Army* is appointed by the President and is directly subordinate to the Minister of Defence.

(vii) *The French Military Mission.*—In 1919 a mission of over 100 French officers was sent to train and organize the Czechoslovak

Army. Its strength has been gradually reduced and it now consists of only eight officers, under the leadership of General Faucher.

(viii) *Territorial organization.*—Czechoslovakia is divided into four military areas, each under a command headquarters (Prague, Brno, Bratislava and Kosice), and each sub-divided into divisional districts. The country is also divided into 48 recruiting districts, which correspond generally to the civil administrative districts.

(*b*) *Divisional troops.*

There are 12 divisions, each comprising :—

2 infantry brigades, each of 2 regiments of 3 battalions each. Each regiment also has 1 reserve battalion. Battalions consist of 3 rifle companies and 1 machine gun company.

1 artillery brigade consisting of :—

1 mountain artillery group of two 7·5-cm. gun batteries and one 10-cm. howitzer battery.

1 field artillery regiment of 2 groups each of three 8-cm. gun batteries, and 1 group of three 10-cm. howitzer batteries

1 medium artillery regiment of 2 groups each of two 15-cm. howitzer batteries and one 10-cm. gun battery.

The field and medium regiments each have a reserve battery in addition. All batteries are 4-gun, but some are on reduced establishments in peace.

1 reconnaissance group of 1 cavalry squadron and 1 section of armoured cars.

1 engineer battalion.

1 signal company of 3 cable platoons and 1 W/T platoon.

1 M.T. company.

1 divisional train (H.T.).

1 supply depot, with bakery and slaughter-house.

1 field hospital.

1 motor ambulance column.

1 mobile dentistry.

1 disinfection column.

Note.—A number of units exist *en cadre* only in peace.

(*c*) *Air service.*

This forms an integral part, and the most efficient part, of the army.

FRANCE.

Conseil Supérieur de la Guerre.

The *Conseil Supérieur de la Guerre* consists of the marshals of France and 12 to 14 senior generals, with the Minister for War as President. The Vice-President is the Commander-in-Chief designate for war and most other members are commanders designate of armies or groups of armies. Each member has a senior officer as his chief staff officer and one or more other staff officers. These form the nucleus of his staff for war.

Members who are appointed as inspectors of arms, &c., report to the Vice-President and not to the Council as a whole.

The Vice-President receives his orders as to the country's policy from the Government, and under his instructions the General Staff draw up appreciations, plans, &c. He is solely responsible for the plan adopted; he may discuss it with the Council, but they have no collective responsibility for it.

If plans involve the co-operation of other services, they would probably be discussed unofficially through the staffs of the services concerned, but there is no existing machinery for such consultations. The ministers, each backed by his senior service representative, for the army the Vice-President of the Council, would then meet to discuss the plan officially. Should they fail to come to agreement, the matter would be referred to the *Conseil Supérieur de la Défense Nationale*, which is practically the Cabinet, certain minor ministers being omitted.

When an important overseas operation is contemplated *ad hoc* committees to ensure co-operation between the services might be appointed.

In the case of a war or an expedition based on one of the colonies, the plan would in the first instance be drawn up by the local commander-in-chief and submitted to the Minister of the Colonies. The latter has a military section in his ministry, and touch with the *Conseil Supérieur de la Guerre* is maintained through the member of that body who is appointed Inspector of Colonial Troops (at present General Claudel). If such a war took on a really serious nature, the Inspector of Colonial Troops might possibly be appointed as Commander-in-Chief, and eventually the control and administration of the war might be

handed over from the Ministry of Colonies to that of War. This had to be done in 1925-26 when the Ministry of War took over from the local administration the direct control of the Riff campaign in Morocco.

GERMANY.

Changes in organization and drill movements.

1. The German rifle company has been organized until recently in 3 platoons, each platoon consisting of 3 rifle and 2 light automatic groups (only 6 light machine guns to each company were allowed by the Inter-Allied Military Commission of Control in Germany).

Amendments to German Infantry Training show that the rifle company is in future to consist of 3 platoons ; each platoon will have 3 homogeneous groups (*Einheits Gruppen*) each consisting of a light automatic section (1 *M.G. Trupp*) and a rifle section (*Schutzentrupp*). The strength of the *Einheits Gruppe* is 1 group leader, 4 men in the light automatic section, and 8 to 10 men, including an assistant group leader, in the rifle section.

2. In column of route the infantry now march in threes, each of the 3 groups in the platoon being in single file behind its leader, with the light automatic section in front of the rifle section.

This system facilitates the deployment of the company or platoon into columns of groups in single file.

The light automatic section normally comes into action first, followed by the rifle section at 50 paces distance.

IRAQ

Iraq and the League of Nations.

On 28th January the Council of the League adopted the following resolution in regard to the emancipation of Iraq from the mandate :—

" The Council having to consider the special case of the termination of the mandate for Iraq :—

(1) Notes the opinion formulated at its request by the Permanent Mandates Commission on the proposal of the British Government.

(2) Considers that the information available is sufficient to show that Iraq satisfies, generally speaking, the *de facto* conditions enumerated in the Annex to the Council resolution of 4th September, 1931.

(3) Declares itself prepared in principle to pronounce the termination of the mandatory regime in Iraq when that State shall have entered into an undertaking before the Council in conformity with the suggestions contained in the Report of Permanent Mandates Commission, it being understood that the right to apply to the Permanent Court of International Justice may only be exercised by members of the League represented on the Council.

(4) Accordingly requests its rapporteurs for minorities questions of International Law and mandates and the representative of Great Britain on the Council to prepare in consultation with the representatives of the Iraqi Government, and if necessary with a representative of the Permanent Mandates Commission, a draft declaration covering the various guarantees recommended in the Report of the Permanent Mandates Commission, and to submit that to the Council at its next Session.

(5) Decides that, should the Council after examining the undertakings which would be entered into by the Iraqi Government, pronounce the termination of the mandatory regime over that territory, such decision will become effective only as from the date on which Iraq has been admitted to the League of Nations."

ITALY.

Libya.

Marshal Badoglio, Governor of Libya, marked the anniversary of the capture of Kufra by the publication of a manifesto in which he declares that the rebellion in Cyrenaica is now " completely and definitely crushed " and that " for the first time since Italian troops disembarked on these shores twenty years ago the two Colonies of Tripolitania and Cyrenaica are completely occupied and pacified."

He concludes by stating that this is not only cause for the legitimate satisfaction of all Italy but " serves as a new point of departure for a more vigorous impulse in the civil progress of the two colonies."

In recent years there have been several premature announcements of the successful conclusion of the campaign in Libya, but on this occasion the Italian claim appears to be justified following as it does on a series of well-executed minor operations during the past twelve months which have resulted in the capture of the more important rebel chiefs and the seizure of their strongholds.

The pacification of Tripolitania and Cyrenaica, which together form the colony of Libya, will enable the Italian authorities to make further progress with the work of civil development. Much has already been accomplished in the coastal regions. Olives and barley are being successfully cultivated, date-palms flourish and the afforestation of the sand dunes is progressing steadily. These achievements have been almost entirely due to State action. The Italian Government supplies the greater part of the necessary capital, supervises the undertakings of the colonists and is at any time prepared to confiscate and re-allot land which is not being efficiently exploited. Unfortunately Libya is singularly barren by nature. It has no rivers worthy of the name and no rainfall comparable with that of the northern sections of Morocco and Algiers. The Italian authorities are thus confronted with a task of enormous difficulty in developing the country and it seems unlikely that it will ever be able to absorb as colonists any considerable proportion of Italy's surplus population.

MOROCCO.

French Zone.

Atlas operations.

Since the last report the operations in the Todra and Gheris valleys have apparently ceased, and the construction of posts to consolidate the area occupied is being carried out. The northern flank guard has now been withdrawn to Mzizel. The force sent down the Draa has reached Amzrou and is constructing a post at that point.

On 15th January, 1932, the French occupied the very important oasis of Tafilalet which has been the refuge of dissidents from the mountainous regions and of the raiding bands from the Sahara. Large

forces of regular troops were concentrated on three sides of the oasis and bodies of auxiliary troops were pushed in. There was apparently not much fighting except around the citadel of Bel-Kacem N'Agid, the principal chief, who finally escaped westwards with a small party. He was pursued by cavalry and his chief lieutenant and a number of his rearguard were killed, and all his lieutenants have since been captured. A road is now being pushed through the oasis from north to south and is to link up Erfoud with Risani and will doubtless eventually join the existing track to Taouz. No opposition has been offered by the tribes now in the occupied area and the leaders have given assurance of their loyal co-operation with the Maghzen and to France.

The *Bataillon d'Afrique* (penal unit) has been disbanded, what remains of its personnel being sent to Tunis.

Of the new railway line from Algeria to Morocco the press reports that the section Oudjda to Guercif has been opened to traffic and will be open for normal use in 3 months.

Tafilalet Area.

The occupation of the Tafilalet continues to bring about the submission of large numbers of families. Bel-Kacem N'Agid is now reported at Zegdou, 200 kilometres east by south of Tafilalet, and 70 kilometres east of the Draa. Towards the end of January, Monsieur Lucien Saint, the French Resident-General in Morocco, travelling by car through Itzer, Midelt and Erfoud, visited the advanced posts in the Gheris and Ferkla valleys and held a review of troops, including the Foreign Legion, French artillery and armoured cars and native auxiliaries, in the oasis of Tafilalet. The establishment of posts along and on the flanks of the new line from Imiter to Erfoud is being continued, not without opposition. The post of Mecissi, 50 kilometres west of Tafilalet, was unsuccessfully attacked on 20th February, and a force moving from Ifech, on the north of the Ferkla plain, to establish a post at Bou Tarart was attacked by tribesmen from the north; these were driven off after hand to hand fighting, the French losses being 14 men killed, 2 officers and 8 men wounded. An officer with some auxiliaries was ambushed and killed at Touroug, near the junction of the Gheris and Ferkla valleys.

These operations will result in clearing the last obstacle to the suggested road and railway from Agadir by the Souss, Dades, and Ferkla valleys through Erfoud and Bou Denib to Algiers.

A working party on the new road to Akka, one of the passes through the Bani Mountains, 200 kilometres south-east of Agadir, was attacked on 26th January by raiders who, after being driven off by the covering party, were pursued southward across the desert by aircraft.

Spanish Zone.

A Decree dated 29th December 1931, provides for further changes in the administration of the Spanish Protectorate of Morocco. This Decree confirms the duties of the High Commissioner and the Commander-in-Chief, and defines the relationship between the military and civil powers, at the same time emphasizing the subordination of the latter. The main interest attaching to the Decree is the provission made in it for the creation of both civil and military political districts, and the reorganization of the political service generally. The political officer in a civil district exercises no military command; in a military district the political officer commands all native troops within its geographical limit and is a serving officer of the army.

ROUMANIA.

Military Estimates.

The military estimates for 1932 are for a total of approximately 7,914,000,000 lei (equal to about £9,700,000 at par) of which 4,357,000,000 lei appear in the ordinary, and 3,556,000,000 in the extraordinary budget. The total state budget is approximately 25 milliards of lei ordinary expenditure and 11 milliards extraordinary so that the military expenditure for all the fighting services represents 23 per cent. of the whole, as against 29 per cent. in 1931.

Considerable reductions have been effected from the level of last year's estimates, and for purposes of comparison a table of the two years' estimates is appended.

The policy has been to confine the ordinary estimates strictly to those items absolutely necessary to the bare maintenance of the services, all others being transferred to the extraordinary, which are liable to cancellation in case revenue fails to reach the level estimated.

Since the Finance Minister in introducing his budget stated that receipts were not expected to exceed 25 milliards of lei—a forecast which is considered if anything to err on the side of optimism—it is not plain whence funds will come to cover the extraordinary estimates, of which more than half is accounted for by debts incurred on the 1930 and 1931 budgets. All payments earmarked for contracts already entered upon have been included in the extraordinary budget.

Provision is made for the following establishment of officers and other ranks—

Officers (including Navy and Air Force) ..	15,765
Re-engaged M.C.Os. (including Navy and Air Force)	13,737
Civilian officials (including Navy and Air Force)	4,319
Conscripts (including Navy and Air Force) ..	118,924
Total (including Navy and Air Force) ..	152,745

U. S. A.

Department of National Defence.

In view of the fact that the new French Government includes a Minister of Defence, it is interesting to note that a Bill for the creation of a Department of National Defence is now being examined by a Committee of Congress.

The subject has been discussed at various times since 1923 and numerous bills have been introduced to Congress without success. However, the present sponsors of the Bill claim that it will effect large economies, an argument which carries great weight in these times of economic depression.

The proposed Department of National Defence would be in charge of a Secretary, under him there would be three Assistant Secretaries in charge of the Army, Navy and Air Forces. The present Secretaries of the War and Navy Departments have given evidence before the Committee of Congress which is examining the Bill ; both are opposed to it on the grounds that the present organization of the War and Navy Departments is the most suitable for carrying out the tasks required. The consolidation of the Army Air Corps and the Naval Air Service

under a single assistant secretary, instead of being under the War Department and Navy Department as at present, is strongly opposed by the Secretary of the Navy. On the other hand, the Chief of the Army Air Corps contends that consolidation would be beneficial, but that a thorough investigation must first be carried out as to how it should be done.

The Bill has got a considerable political backing and there is a possibility that it may fare better than its predecessors.

NOTES ON MILITARY REVIEWS.

"BULLETIN BELGE DES SCIENCES MILITAIRES."

Published by Imp. Typo. de l'Institut Cartographique Militaire, Brussels.

Price, 1·50 Belga.

December, 1931.

1. *The Operations of the Belgian Army during the War* 1914—18.

The chief interest in this article lies in the correspondence between Marshal Foch and the Belgian G.Q.G., which brings out once more the Belgian contention that their army always maintained its complete independence and was in no sense under Foch.

2. *Pages of the History of the Belgian Army in the Great War.* By Major-General Deschacht.

Quite an interesting account, particularly to those who have no knowledge or experience of these Belgian forts.

But one is left wondering whether troops properly entrenched in the open would not have achieved as much.

3. *The Citadels or Permanent Fortification of Antiquity.* By Major F. Delvaux.

A continuation of the series of articles on this subject which was commenced in the October number. It is well written and of distinct interest to those who make a study of ancient fortifications.

4. *French Provisional Field Service Regulations.* By J. V.

A continuation of the review of the new French Provisional Field Service Regulations which commenced in the November number.

5. *An "aide-mémoire" for Group and Section Commanders.* By Captain Collin.

This article is an effort to simplify the tactical instruction of Group and Section Commanders. It seems a little complicated.

January, 1932.

1. *The Operations of the Belgian Army during the War,* 1914—18.

An interesting account of the fighting on the Belgian front, north of Ypres on 17th April, 1918.

The German attack met at first with a certain success, penetrating to a maximum depth of 1,200 metres on a front of 2 kilometres. Here it was definitely checked and a well-staged counter-attack delivered the same day restored the Belgian position practically in its entirety.

2. *Pages of the History of the Belgian Army in the Great War.* By Major B. E. M. Boutra.

Quite a well-told story of an affair of outposts on the Belgian front.

3. *The Battle of Kemmel, April,* 1918. By Captain Deruer.

An account of the French intervention in 1918 on the front of the British Second Army in Flanders. The author, Captain Deruer, a graduate of the French Staff College and at present employed at the Belgian Ecole de Guerre, was serving at the time in the French 28th Division, the first infantry division to be sent to General Plumer's assistance.

4. *The H. Q. of an Infantry Division at work preparatory to the occupation of a defensive position.* By Lieut.-Colonel B. E. M. Derousseaux.

An infantry division is detraining in the area of operations with a view to occupying a defensive position.

This is a detailed study of the necessary preliminary work of the H. Q. staff which has proceeded in advance of the bulk of the troops.

The article is very carefully thought out and has undoubtedly a certain instructional value, but it cannot of course take into account the innumerable unexpected happenings which contribute to the interest and instruction of an exercise of this sort in practice.

5. *The Citadels or permanent fortifications of antiquity.* By Major F. Delvaux.

This is the third of the series of these very interesting descriptions.

February 1932.

1. *The Operations of the Belgian Army during the War* 1914—18.

A continuation of the series of articles on this subject, and deals with the events of the late spring of 1918 so far as these affected the Belgian front.

2. *The Battle of Kemmel, April,* 1918. (Captain Deruer).

Continues the account commenced in the January number. This article deals with the German attack and capture of Kemmel on 25th April, 1918, and is of considerable interest. The writer emphasises the mistaken policy of the French command in ordering offensive action by the divisions in the line in order " to give Kemmel some more air," even though they knew that a German offensive on a great scale was to be launched in a few days. These partial attacks by the French achieved no results, caused numerous casualties and great fatigue to the troops, and disorganized their defensive positions, and probably contributed in no small degree to the rapidity of the German success on the 25th.

The writer stresses the futility of the counter attacks (ordered by the 2nd British Army) of the 39th French and 25th British Divisions on the morning of the 26th, with no proper reconnaissance and no artillery support possible, but it is open to discussion whether these counter attacks did not justify themselves by achieving the disorganization of the further German attack planned for 8 a.m. on the same day. But when all is said, it was probably the German High Command who had lost their confidence in victory, who were quite as much responsible for the eventual failure of their offensive as the defensive measures of the Allies.

3. *The Man of Destiny.* (Lieut.-Colonel B. E. M. Van Overstraeten).

A review of Liddell Hart's " Foch, the ' Man of Orleans.' "

4. *Disarmament Conference.* (Major B. E. M. Diepenrykx.)

A short article explaining the armaments truce which preceded the present Disarmament Conference, together with the text of the French and British memoranda on disarmament addressed to the

League of Nations and an appendix containing a statement of the terms of service obtaining in the armed forces of the various powers. The author is well qualified to write on this subject since he is a member of the Belgian delegation to Geneva.

"REVUE MILITAIRE FRANCAISE."

Published by Berger Levrault. Price, 5·50 francs.

December, 1931.

1. *The effort to reach a decision.* (Part IV.) By General Faugeron.

The difficulties of effecting a break through between 1914 and 1917 are fully dealt with. Owing to the length of the front it was never possible to fix the enemy reserves, and as no attack was staged on a front longer than 50 kilometres he was always able to bring up sufficient troops to block any gap. Only artillery could break down his wire and other defences and the extent of preparatory fire required gave sure warning of the front threatened.

2. *The Government and National Defence.* (Part III.) By Chef de bataillon Guigues.

Deals with the training and administration of the national armies.

3. *The 10th Russian Army and the Disaster of Augustovo.* (Part III.) By Colonel Aublet.

A pathetic story of the retreat of the army when both its flanks had been turned, with an amazing incident when the army commander refused a request of a corps to withdraw in a southerly direction as it would block the retreat of other corps, while at the same moment the Chief of Staff of the army was telegraphing a direct order for this withdrawal southward.

4. *The 1st Corps from Belgium to the Marne.* (Part V.) By Lieut.-Colonel Larcher.

Describes a night attack in massed formation by a brigade some three to four thousand strong on a misty night, which was entirely routed by a sudden outbreak of machine gun fire in some cases at 15 yards range; the disengaging attack by the 33rd Regiment, and the unmolested withdrawal of the whole corps on the 30th is well described. It is interesting to note that one artillery brigade, whose batteries had fired 900 rounds on the 29th, succeeded in completely

refilling their limbers and wagons by the morning of the 30th. The total losses of the corps were 3,500, including almost all the 2nd. Lieutenants of the latest batch from Saint Cyr, who had made the united vow to go into action wearing their plumes and white gloves. The troops felt they had gained a victory and the value of this victory was very quickly magnified in popular legend.

January, 1932.

1. *The effort to reach a decision.* (Part V.) By General Faugeron.

This instalment deals almost entirely with Ludendorff, tracing his career from the bold effort that resulted in the penetration of Liége, through his collaboration with Hindenburg on the eastern front, to his period of virtual supreme command of all the German forces from September 1916 up to the armistice. His successes in Russia, where twice he brought off his strategy of double envelopment led him strongly to criticise Falkenhayn's policy on the west, and not until taking over a supreme command did he fully appreciate the difference between fighting Russians and opposing British and French troops. A suggestion is made that by treachery Ludendorff was always aware of the Russian plans, but these were more probably obtained from the Russian wireless which was grossly misused (*c.f.* article in " Revue Militaire Francaise " of August, 1931), Ludendorff came in 1917 to rely on the submarine campaign and the defeatist propaganda rather than on his troops to obtain a decision. In 1918 when the collapse of Russia gave him numerical superiority on the western front, the author feels that his tactical successes led him away from his real strategic objective (*c. f.* article in " Revue Militaire Francaise " of July, 1931.

2. *The Government of National Defence.* (Conclusion.) By Chef de bataillon Guigues.

Describing further the immense difficulties of organization of the National Armies, and the drastic disciplinary laws which were passed but were of little avail owing to their not being enforced. There was the greatest difficulty in producing maps, for although the plates of the 1 : 80,000 survey of France had been sent from Paris to Brest, the Government at Tours was not informed and they were never used. The author draws the lesson that improvisation is more dangerous and only sound organisation can ensure security.

3. *The 1st Corps from Belgium to the Marne.* (Conclusion.) By Lieut.-Colonel Larcher.

Follows the continued retreat from Guise to the Marne which was successfully covered by a weak cavalry rearguard. The author sums up by saying that this corps had covered 350 kilometres, had fought three battles in a month, and had met nothing but success. It is of interest to note that in July, 1914, Marshal Franchet d'Espérey had told his officers that the war which was then imminent would be bitter and costly and would last several years.

4. *The 10th Russian Army and the Disaster of Augustovo.* (Conclusion.) By Colonel Aublet.

Follows the movements of the 20th Corps up to its being completely surrounded on 21st February. The losses of this corps were some 75 per cent. of its effectives in killed, wounded and prisoners.

5. *Organization of defence on the wing of an army.* (Part I.) By General Chauvineau.

The writer, who is at present Commandant of the Engineering School at Versailles, and was formerly Chief Instructor in Engineering at the *Ecole Superieure de Guerre*, considers in detail the tactical and technical questions of the preparation of defensive lines against a threat of flank attack. The problem of defending river lines is carefully argued, the decision being in favour of an outpost line along the obstacle with a main line of resistance drawn back so that the attackers have to deploy after crossing the river; the position should, however, be sufficiently near for the defending artillery to be able to fire on the river crossings and in front of the main line of resistance without changing position. The distribution of technical personnel and of working parties is fully gone into, and detail of the work to be executed will be dealt with in later articles.

REVIEWS.

"The Soldier and the Empire." By Captain F. P. Roe, F.R.G.S., A.E.C. (*Gale and Polden, Ltd.*) 5/- nett.

Captain Roe has been inspired by the new syllabus in "Educational Training" (1931) which lays down that the soldier shall have a knowledge of the Empire as it is to-day, the part played by the Army in acquiring it in the past, and the Army's share in maintaining and protecting it. Particular attention must also be paid to Regimental History. This is a very wide field for one publication, and in compressing it into a book of 271 pages the author of necessity has had to guard against too much detailed description. The result is therefore an outline only and instructors will have to turn to other sources if they wish to give a thorough grounding in the subject. The style is simple and easy to read but the thread is often broken by accounts of how units acquired Battle Honours. On page 123 the Sikh Wars are dismissed in four lines and the paragraph ends by saying "Eight British Regiments of the line and three Cavalry Regiments carry this name (Sobraon) on their colours." One can imagine that this subject of Battle Honours presented many difficulties. In most cases they are not stressed to such an extent as to occupy valuable space, but an exception is an account of how the Twenty-eighth Foot acquired the privilege of wearing the "back badge" in 1801, and how this badge was increased in size by the gallant behaviour of a battalion of the Gloucestershire Regiment in the Great War. As the Author remarks it is an extraordinary example of the maintenance of tradition in a Regiment, but its description rather breaks into the narrative of "The Acquisition and Consolidation of the Empire." Imperial Geography is touched on and the chapters dealing with Canada, Australia and New Zealand contain notes on immigration.

Besides a general index there are useful indices to battle honours and regiments and the book contains a number of interesting illustrations in monochrome and colour. Captain Roe has provided a text book which will be of help to instructors who have to teach the new syllabus, but a bibliography would be a valuable addition.

J. E. H.

Armaments Year Book (Special Edition).

(LEAGUE OF NATIONS, GENEVA). 7/6.

This is a special edition of the Armaments Year Book prepared for the use of the delegates to the Disarmament Conference. It gives the organization and composition of the various armies in a more condensed form than the usual edition which makes it a much better reference book for students. The paragraphs in the various monographs on the " Main characteristics of the Armed Forces " and "The organs of military Command Administration " are the most interesting and give the ideal potted reviews required by staff college candidates.

The Budget figures, however, lose much of their interest in that there is no means of comparing the percentage of the total Budget devoted to defence by the various powers.

As a standard reference work this special edition of the Armaments Year Book should be in all Libraries.

H. S.

Historical Record of the 4th Battalion, 16th Punjab Regiment.

(PRINTED FOR PRIVATE CIRCULATION).

This is a well-produced battalion history. The Bhopal Battalion has existed, under various names and with one small break in continuity, for well over a hundred years ; and it was high time that some of its actions and traditions were put on record. To my mind this book (about 175 pages, crown octavo) is just about the appropriate size for the history of an Indian battalion ; and the subject also has been treated in an appropriate manner.

On a few points the book requires some supplementing and correcting. Doubt is expressed (p. 3) whether Captain James Johnstone (whose name is wrongly spelt) was the first British officer commanding. He *was*, however, Commandant from 1825 to 1828 *vide* Major V. C. P. Hodson's *List of Officers of the Bengal Army*, Vol. II, p. 563. The name of Captain Cawthorn is correctly spelt at p. 160; but wrongly given at p. 141; and is omitted from the index.

Indeed, the index has not come well out of the few tests to which I have put it. The Colours of the Bhopal Contingent Infantry, which are stated to have disappeared in 1886 and not to have been traced, are now in the Royal United Service Museum in Whitehall, where I have myself seen them.

There are some useful and clear sketch maps ; but no illustrations. As regards the early part of the history, which was compiled over twenty-five years ago and is an admirable outline, insufficient revision would appear to have been carried out in the light of subsequent orks, such as Col. C. E. Luard's *Bhopal State Gazetteer* (1908) and Major Hodson's monumental book already quoted. But these are small blemishes on a record which is well above the average of Indian regimental histories in the quality of its presentation.

H. B.

Note.—Copies are obtainable from the Adjutant, 4/16th Punjab Regiment, Drosh, Chitral, at Rs. 15-10-0 each and from Messrs. Gale & Polden, Aldershot, at s. 21/6.



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EDITORIAL.

The Cut in Pay.

In his pay bill for the month of November 1931 every officer in the employ of the Government of India found himself confronted for the first time by that unwelcome item, "Deduction on account of temporary ten per cent. cut in pay." He was told that the condition of Indian finances was such that this sacrifice was demanded of him as much by patriotism as by necessity, and he accepted it on those grounds, comforting himself with the assurance that it *was* temporary. He has now had ten months' experience of this reduction in his income, and he would be more than human if, as the year draws to its close, he were not wondering whether these reasons of patriotism and necessity still hold, or whether the time is approaching when it might wisely and safely be demonstrated that the cut was indeed temporary.

The truth is that the officer, especially the junior married one, whether civil or military, has found the effects of the cut much more serious than was anticipated. A good deal of nonsense has been talked, usually by those whose experience is limited, about the high standard of living amongst European officials in India, but no one who had any first-hand knowledge of conditions in the ordinary station believed that the average married couple wasted much of their substance in riotous living. Nevertheless when the cut fell upon them, the official and his wife started off optimistically enough to "reduce their standard of living." It was then that they discovered there

really was not so very much that they could reduce. They could not move into a smaller house—there were no smaller houses and the hotels of India are as expensive as they are bad. Servants were already reduced to the minimum unavoidable in a country where one domestic is permitted to do only a quarter of a man's work. The expenses of a hot weather separation could neither be avoided nor substantially reduced. Something could be saved by cutting out the short drink before dinner and by strict rationing at other times, by giving up the occasional dinner party to their friends, by passing on a fraction of the cut to their servants, and by bitter wrangles with the *khansamah*. But the sum total of their efforts—and they did make real, honest efforts—was grievously small; few of the larger items of the family budget could be seriously touched. Rent, servants' wages, regimental subscriptions, income-tax, family pension funds, clothing, stores bills, education and insurances, all were as before; any slight reduction in one was counterbalanced by increases in others. Indeed with increased customs duties and higher income-tax, the cut was in practice found to be fifteen per cent rather than ten.

After doing their best to reduce expenses to the utmost practical limit in a tropical country, it is safe to say that there are no junior, and few even comparatively senior Government officers, with families and without private means, who do not find it desperately difficult to provide for their children's education. Either the children are at Home—and there has been no cut in school fees—or they are still in this country and, if they are to have any hope of future schooling, money must be found for their educational insurance. The amount that could be spared for such educational and for life insurance was calculated before pay was cut, but the same premia must still be paid from the reduced pay. This has been one of the main factors in upsetting the family budget, and it is not often realized in how many cases the insurance policy has had to be pawned to cover either an overdraft at the bank or its own premium. On the surface things may not seem so very changed—less entertaining, families that stay longer in the plains, a greater keenness to get any job with a little extra pay; beyond this all is much as it was. But underneath is a growing anxiety as to what will happen if the overdrafts go on increasing, month after month, year after year. *The cut may be temporary, but if it continues much longer, its effects will be permanent.* For most married British officers of every Service in India the alternatives are a

gradually increasing indebtedness with all that this entails in anxiety, ill-health, discontent and loss of efficiency, or a restoration of the cut in some form.

It is not only because of the increasingly serious position of the individual officer, but because of its adverse effects on the contentment and efficiency of the Services as a whole that every possible avenue of alternative economy should be explored in order that the cut may be restored. Above all things it is essential that, before legislation to prolong the cut over another year is brought forward, it should be conclusively shown that its retention is necessary for the financial stability of India. Compared with a year ago the financial position of India has vastly improved. Civil disobedience with all its cost in disturbance and delay in collecting revenue is practically dead; agricultural prospects are on the whole good; drastic economies made in expenditure should produce a balanced budget. Unless there is some unexpected deterioration in the political or commercial situation the restoration of the cut ought not unduly to strain India's resources in 1933.

As far as the Fighting Services alone are concerned, there are good grounds for the belief that, in spite of the immense reductions in defence expenditure of recent years, ways could be found, even within the present reduced budget, to restore the cuts. If this for political or other reasons is not considered feasible it is to be hoped that, in the interests of efficiency, the temporary grant of some form of Children's Allowance will be considered. In England, not only is the cut actually less as it does not include allowances which form a large proportion of the Home pay, but married men with families receive substantial remissions in income-tax which have no counterpart in India. Failing the restoration of the cut, the grant of a Children's Allowance to British Officers and Officials in India would do something towards brightening a domestic financial outlook which grows more and more gloomy.

* * * * * * *

The Untouchables' Bargain.

Mr. Gandhi was steadily becoming an example of the proverb, "Out of sight, out of mind," when, in masterly fashion, he regained the centre of the stage by his dramatic fast. In the spate of press articles dealing with his action there has been more than a tendency to overlook one very important thing. Mr. Gandhi had announced that he would die a hundred

deaths to remove the cruel and degrading disabilities that his fellow Hindus inflict on the Untouchables. If, then, he had decided to starve himself to death unless these disabilities were removed he would have had strong claims to sympathy, certainly to the sympathy of all Englishmen. But, however, much he might express concern for the Depressed, the fact remains that he was not fasting until their ghastly social and religious oppression was removed, but until they were deprived of separate electorates. This was the essence of the whole matter. Mr. Gandhi might want, as he said he did, the social degradation of the Untouchables relieved, but he did not want this to anything like the extent that he passionately desired them to be deprived of separate political representation. For the first he would preach ; for the second he would die. It almost seems as if the Politician had got the better of the Saint.

At any rate, the direct result of Mr. Gandhi's intervention has been the settlement of the dispute between the Untouchables and the Caste Hindus on the subject of representation in the Legislatures. At first sight the agreement reached might be hailed as a complete victory for the oppressed. Some English newspapers have even gone so far as to declare that it marks the end of Untouchability and the beginning of the break-up of the Hindu caste system. A study of the terms of the agreement would have shown them how false this view was. It is a political compromise, not a charter of social reform. At the beginning of the negotiations the Depressed Classes' leaders stood out for the grant, not so much of political safeguards, as of social concessions. Suddenly, for reasons best known to themselves, the social and more important side of the question was allowed to drop and the discussions fell to the level of mere political adjustment. Under the threat of Mr. Gandhi's suicide the Depressed Classes have given up their separate electorates, and in return have received an increase in the number of their members in Provincial Councils from some 71 to 148. On the face of it this should greatly strengthen their representation, but in practice the advantage is doubtful. In London Mr. Gandhi opposed the reservation of seats for the Depressed Classes just as he opposed their separate electorates. Now, while still prepared to die if separate electorates are allowed, he has changed his mind and accepted the reservation of seats. It is permissible to wonder why. Possibly an answer may be found in the method by

which the Depressed Classes' members are to be chosen. The Depressed Classes will first hold a preliminary election amongst themselves at which they will choose four candidates for each of the seats allotted to them. These candidates will then submit themselves to the joint electorate of Caste Hindus and Untouchables. This is where the danger lies. Of the four chosen candidates it is unlikely that the Caste Hindus, with their immense social, religious, and economic hold over the Depressed Classes, would fail to ensure that at least one was pliant to their wishes. At the final election they will be in a majority and can invariably elect this candidate. The result will be that, while actually of the Depressed Classes, the elected member will too often be the nominee and tool of the Caste Hindus. In ten years even the poor safeguard of the preliminary election is to vanish, and it will then be impossible for a Depressed Classes' member to secure election unless he obtains the Caste Hindu vote, and he will not obtain that if he presses too strongly the social claims of his own people. There can be little doubt that the Depressed classes would have secured better and more real representation under the Government award, even with its fewer seats, than under the present arrangement.

While they have thus in reality done little to strengthen their political position, the Depressed Classes have obtained no social or religious concessions by this Agreement. There were at one time hopes that they would wring a guarantee from the Caste Hindus of such elementary rights as freedom to enter temples, permission to draw water at public wells, equality in schools, and the like. There is no mention of these in the Agreement; it deals purely with political matters. It expresses the pious intention that there should be no disabilities against the Depressed Classes for election to local bodies or public services and that every endeavour should be made to secure them "fair representation in these respects subject to educational qualifications." In practice this will mean exactly nothing. The only item of the Agreement which is not purely political is the last which lays down that in each Province from the total grant for Education an adequate sum shall be allotted to the Depressed Classes. It is safe to say that if these sums ever materialize they will be used to segregate the Outcastes in separate schools, and thus to perpetuate their social inferiority.

The Untouchables would do well to examine the bargain they have made. Mr. Gandhi may honestly believe that, in return for the

questionable concession of more seats in the Legislatures, they can safely entrust their future to the brotherly love, so newly awakened, of the Caste Hindu, but others will have their doubts. It may be that by his vociferous professions of love for the Untouchables and horror at the wrongs inflicted on them, the Mahatma has antagonized the strictly orthodox Brahmanical section of the Hindu community, but the practical effects of his sympathy do not seem to have gone far. However that may be, Mr. Gandhi is in an agreeable position. To the Hindus he can claim to have saved their political supremacy at the cost of little or no social or religious concession; to the Untouchables he can pose as the sympathetic friend who has obtained for them increased political representation at the expense of the Caste Hindus.

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Bengal.

While the rest of India has shown a most satisfactory return to more normal conditions, in Bengal outrage has followed outrage. At first most of these Terrorist crimes had as their object the theft of arms or money; then to an increasing degree the murder of British and Indian officials became their aim; now the avowed intention is the indiscriminate slaughter of all British, Anglo-Indians and loyal Indians, irrespective of age, sex or occupation. The Terrorist Party has announced in its leaflets that it is as anxious to murder European children as it is foully to do to death their parents. It has adopted the methods and ethics of the mad dog—and there is only one treatment for mad dogs.

The trouble is of course to apply the treatment. The number of active Terrorists, as distinct from mere conspirators, is small, but they are drawn from a very large class and outwardly of course are indistinguishable from the mass of young middle class Bengali Hindus. Having committed his crime all that the Terrorist has to do is to sink back into the crowd and to leave the Police to try and pick him out from the thousands of apparently identical young men. Considering the immense difficulty of this task and the handicaps under which they have laboured, the wonder is, not that the Police have achieved so little, but that they have done so much in their campaigns against Terrorism. For it must be remembered that this is not the first attempt in Bengal to paralyse Government by organized assassination. From 1908 Terrorist activities, culminating in political dacoities and murders, increased to such an extent that in 1916 Government was compelled to make full use of the powers of the war-time Defence of

India Act. Armed with these, in two years the Police broke up the organisation, and, by 1919, Terrorist crime had practically ceased. In that year the Defence of India Act lapsed and the Terrorists gradually resumed their underground activities, until in 1923 there was another outbreak of political murder, which left the British Labour Government with no alternative but to approve the issue of the Bengal Ordinance of 1924. This Ordinance was incorporated in the Bengal Criminal Law Amendment Act 1925, and, while not nearly as powerful a weapon as the Defence of India Act, did confer on the Police powers which enabled them by 1927 to master the Terrorists. There were no assassinations in that year or in 1928. The Act, however, lapsed in 1930, the Police lost their powers, and Terrorism once more broke out with the Chittagong Armoury raid. Terrorist activity thus clearly follows a definite cycle. First, the stage of underground conspiracy; next the sudden outbreak of violent political crimes, with which, under the ordinary law, the authorities are unable to cope; then the grant of special powers to the Police and a hard struggle, lasting usually about two years, until the Terrorist organization is smashed and assassinations cease. After this the special powers of the Police are withdrawn or allowed to lapse, interned Terrorists are released to rebuild their organizations, and the whole wretched cycle repeats itself.

Depressing as this review of Terrorist activity and Government counter-action is, it might be anticipated from it that the present outbreak should be overcome by about 1933, but it must be confessed that this time the struggle promises to be more prolonged. The reasons for this are plain. The Civil Disobedience movement, although crushed, has left behind it a legacy of disrespect for the law, increased to contempt by the dilatory and undignified proceedings of the conspiracy trials. Added to this has been the virulent, mendacious and in Bengal almost universal press campaign of racial hatred, conducted by Congress and rendered possible by the repeal of the Press Act in 1922. This propaganda, unchecked for nine years, has resulted amongst a wide section of Bengal Hindus in a mentality which regards political assassination with sympathy or at least with apathy. Congress bodies, like the Calcutta Corporation, while paying lip service to non-violence, have not ceased in practice to condone and excuse, and thus to encourage, the cold blooded murder of officials. It is this almost complete lack of a healthy public opinion amongst middle

class Bengal Hindus which makes the stamping out of Terrorism so much more difficult to-day than formerly, and the first task must be to induce a sounder attitude towards crime in the ordinary population.

In this Government should have the active help of every Indian politician, but it is evident that in many of them the necessary physical and moral courage is wanting. All the more honour and encouragement is therefore due to those who realize that to combat Terrorism is the best service any Indian can now render his country. In addition to the organization of public opinion, it is evident that a thorough overhauling of the Bengal educational system is needed, even though the full effects of this might not be left for some years. Finally, while anything in the nature of indiscriminate reprisals is to be whole heartedly condemned, it is time that the inexplicable leniency that the courts have shown to those convicted of murderous crimes should cease. There is much to be said, too, for the enforcement of some form of collective responsibility. The sins of the children might with justice and effect be visited on the fathers, who, especially in the Hindu family system, cannot divest themselves of responsibility. So much for the guilty and their sympathisers ; there remains the vast number of inoffensive citizens who would willingly see an end to this murder campaign but who, fearing the Terrorists' vengeance, refrain from any action. Steps must be taken to convince these people that the resources of Government are not at an end and that they will not suffer in the future if they now refuse to countenance assassinations.

One of the main objects in the recent despatch of troops to Bengal is to inspire this confidence. In many parts of Bengal it is decades since a soldier has been seen ; no wonder many believe that, beyond the Police, Government has no means of enforcing its authority. The sight of troops will correct this. They are not being sent to occupy a hostile country but to restore confidence amongst the general public. They will in addition, of course, especially assist in the protection of Europeans, and, by relieving the over-worked police of many duties of a semi-military nature, will liberate them for their proper tasks of tracing and arresting criminals. Few duties are more distasteful to the soldier than those that fall to his lot when called to act in aid of the Civil Power, and the inconvenience and expense entailed by the move to Bengal are considerable. But all these will be accepted

cheerfuliy in the knowledge that the Army is doing something to safeguard Europeans, women and children, and to support those British and Indian officials and Police whose conduct and courage in the face of constant danger and difficulty have been the admiration of the Fighting Services.

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The Indian Military Academy.

Recently there passed almost unnoticed an event which will have more effect on India's future than many a political crisis that has filled the newspaper head lines—on 1st October 1932 the Indian Military Academy was opened.

The Army was fortunate in finding in the Railway Staff College at Dehra Dun a building, that with some alteration was well suited for its purpose, in a locality which enjoys a good all the year climate and offers ample training facilities. In March last preparations to receive the first batch of Gentlemen Cadets commenced, and it can be imagined that to start such an undertaking from the very beginning is no light task. Any doubts as to whether enough suitable cadets would be forthcoming were set at rest by the applications to sit for the first competitive examination in July 1932. There were only fifteen competitive vacancies, but 430 candidates offered themselves, and this in spite of the fact that the local civil officials carefully considered each applicant before submitting his name. A preliminary Admission Board selected 104, who in turn were reduced to 68 by the Interview and Record Board. The fortunate 68 then competed in the written examination and 61 of them qualified. Of these the first obtained 68 per cent. of marks in the whole examination and the fifteenth 57 per cent.—results which compare favourably with the scale of marks obtained by former Indian candidates for Sandhurst. It is interesting to note the communities from which the first fifteen cadets were drawn :—

Mahomedan	6
Hindu	4
Sikh	2
Parsi	1
Indian Christian	1
Anglo-Indian	1

To these fifteen have been added another fifteen cadets selected from well-educated and young non-commissioned and Indian officers of the Indian Army, and ten more nominated by Indian States. The Academy, therefore, opens with forty cadets.

For the first year cadets will be organized into two companies; for subsequent years as numbers increase into four companies. The course is to be one of four terms (2 years) for Indian Army Cadets, and of six terms (3 years) for other entrants. This shortened course for a proportion of the cadets introduces a considerable complication into training and it remains to be seen whether the military experience of the Indian Army cadets will compensate for a year less study. The new Academy has to train for all arms of the Service and is thus confronted with the difficulty—and a very real one—of combining in the same syllabus instruction given separately at Woolwich and Sandhurst.

But these, and a hundred other difficulties unavoidable in such an undertaking, cannot fail to be surmounted by a team composed of the Commandant and his Staff, all picked officers from the Army in India, and the Gentlemen Cadets, young men whom a rigorous selection has ensured are representative of all that is best in India.

NOTICE.

As the Institution has enjoyed a particularly successful year financially the Coucil has decided to assist officers suffering from the cut in pay by temporarily suspending the Entrance Fee. Officers may now become full members on payment of the annual subscription of Rs. 10 only. As a further concession those joining now will not be charged any further annual subscription until January 1934.

Members are earnestly asked to bring these advantageous terms to the notice of non-members.

GOLD MEDAL PRIZE ESSAY COMPETITION, 1933.

The Council has chosen the following alternative subjects for the Gold Medal Prize Essay Competition for 1933 :—

(*i*) **" With the tendency of modern Military Organization towards Mechanisation, the increasing complexity of modern weapons and the dependence of troops on their maintenance services, it is asserted by many that Regular troops are losing the degree of mobility necessary for the successful performance of their role on the North-West Frontier.**

Discuss how this difficulty can be overcome so that freedom of action and tactical mobility are assured in the Army in India.

or

(*ii*) **" Discuss the tactical employment of Light Tanks,**

(*a*) with Cavalry

(*b*) with Infantry

in both the plains of India and in the mountainous country of the North-West Frontier ; particular reference should be made to the problems of Maintenance and Supply."

(NOTE.—For the purpose of this essay the following may be assumed :—

Organization—Light Tank Company of 3 sections each of 7 tanks ; 1 Company Commander's tank and 3 reserve tanks. Total 25 tanks.

Crew of Vehicle—2.

Armament—One ·303". Vickers gun (Special tank pattern).

Ammunition—3,000 rounds ·303".

Armour—Capable of resisting ordinary ·303" ammunition, ·303" A. P. and shrapnel.

Speed average—Across country. 4—12 m. p. h. Road and track 20—25 m. p. h. Reduced to 15 in convoy.

Crossing power—Trench 5 feet. Water 2 feet 6 inches.

Climbing power—Slope—1 in $2\frac{1}{2}$. Perpendicular obstacle—2 feet.

Circuit of Action—Road approximately 100 miles.

Petrol fill—20 gallons.

The following are the conditions of the Competition :—

(1) The competition is open to all gazetted officers of the Civil Administration, the Royal Navy, Army, Royal Air Force and Auxiliary Forces.

(2) Essays must be type-written and submitted in triplicate.

(3) When reference is made to any work, the title of such work is to be quoted.

(4) Essays are to be strictly anonymous. Each must have a motto, and, enclosed with the essay, there should be sent a sealed envelope with the motto written on the outside and the name of the competitor inside.

(5) Essays will not be accepted unless received by the Secretary on or before the 20th June 1933.

(6) Essays will be submitted for adjudication to three judges, chosen by the Council. The judges may recommend a money award, not exceeding Rs. 150, either in addition to or in substitution for the medal. The decision of the three judges will be submitted to the Council, who will decide whether the medal is to be awarded and whether the essay is to be published.

(7) His Excellency the Commander-in-Chief has offered a Special Prize of Rs. 150/- for the best essay submitted on subject (*ii*). This prize is in addition to any awarded by the Council.

(8) The name of the successful candidate will be announced at a Council Meeting to be held in September or October 1953.

(9) All essays submitted are to become the property of the United Service Institution of India absolutely, and authors will not be at liberty to make any use whatsoever of their essays without the sanction of the Council.

(10) Essays should not exceed 15 pages of the size and style of the Journal, exclusive of any appendices, tables or maps.

THE GOLD MEDAL PRIZE ESSAY, 1932.

The judges appointed for the 1932 *Competition*, viz., *Lieut.-General Sir Walter S. Leslie, K.C.B., K.B.E., C.M.G., D.S.O., Sir David Petrie, Kt., C.I.E., C.V.O., C.B.E., M.A., and Mr. G. R. F. Tottenham, C.I.E., I.C.S., have given first place to the essay submitted by Lieutenant R. G. Thurburn, 2nd Battn., The Cameronians (Scottish Rifles). The Council of the United Service Institution of India has, accordingly, awarded a gold medal and Rs.* 150/- *to Lieut. Thurburn.*

The essay submitted by Captain M. C. T. Gompertz, Indian Army Service Corps, was placed second in order of merit.

SUBJECT :

"Disarmament, and its effect on the foreign policy of the British Empire."

BY LIEUT. R. G. THURBURN, 2ND BN. THE CAMERONIANS (SCOTTISH RIFLES).

I.—The Foreign Policy of the Empire.

Political tradition in Great Britain has long placed the conduct of foreign affairs outside the arena of party politics. The resultant continuity of policy which has ensued in our relations with foreign powers has consequently been a cause of envy by those peoples pursuing less stable courses. Any international arrangement or agreement which is likely to cause a departure from our settled policy becomes, therefore, a matter of considerable concern to the Empire in general and to such bodies as, for instance, the Committee of Imperial Defence in particular, whose business it is in the last resort to implement our foreign policy by recourse to armed force.

Prior to the twentieth century the foreign policy of Great Britain, could be summed up, in Lord Salisbury's phrase, as one of "splendid isolation." The Victorian era had witnessed a gradual but steady consolidation of the Imperial power, and at the same time a commercial expansion not previously imagined. Contemporary events in Europe and outside of it—the American Civil War, the Austro-Prussian War, the Franco-German War, the Italian risings, and the Russo-Turkish War—had not inclined the people of Great Britain to view any closer contact with foreign nations as either desirable or necessary. 'John Bull' was the acknowledged strong man : his influence could be felt

without the necessity for intimate partisanship. But with the new century a new situation forced statesmen everywhere to reconsider the position. Commercial rivalry and nationalistic cravings for expression became stronger with each passing year.

The currents of world politics forced the Great Powers into the two groups which struggled for mastery during 1914—18. It was during this period that the Dominions of the British Empire came of age, a fact which was definitely recognised in the opinion of the world by the separate representation allotted at the League of Nations. Any question affecting the foreign policy of the British Empire to-day is one, therefore, which affects not only Great Britain, but the entire group of nations and dependencies which comprise that Empire. The Statute of Westminster has further elaborated their independence in this respect, nor does any provision apparently exist as yet for co-ordinated action in an emergency other than by the tedious and clumsy methods of general consultation.

The position is further complicated by the fact that Great Britain is a signatory to treaties guaranteeing armed action in Europe on the side of one State attacked by another, treaties to which the Dominions are not necessarily parties, and that should the necessity for British intervention arise, such action might be undertaken by Great Britain alone, or with the partial adherence of the Dominions. Such a situation arose in Chanak in 1922, when conflict with Turkey appeared likely, and yet all Dominions were not prepared to co-operate.

The tendency of late years has been for the British Empire to draw its component parts closer together, and to act in greater concert as a force for world peace, but while such treaties exist as require military action by Great Britain the possibility of isolated action on her part must be considered.

Europe apart, situations arise from time to time necessitating armed action by Great Britain. Such action may or may not be carried out with the concurrence of the self-governing Dominions, and in the first instance is bound to be done without their military assistance. Such situations have arisen since the German War ; in Afghanistan (1919), Iraq (1920), S. Kurdistan (1922—30), Shanghai (1927), and recently in Palestine and Cyprus. Any one of these situations might have developed to a greater extent than it did and have thereby necessitated the employment of larger forces.

A very brief consideration of the diversity of races in the Empire and the varying standards of their development will suffice to indicate the nature of present and future difficulties. In addition, the peculiar nature of Imperial communications, maintained almost entirely by sea and air, renders our supremacy in these directions a matter of vital concern to us. Russia and the United States of America, the States nearest approaching the British Empire in territorial size, are compact and almost self-contained. They do not lie under the necessity of safeguarding many thousands of miles of shipping routes, canals, naval bases, aerodromes, cables, and the host of means whereby the safety of the British Empire is secured in time of war.

It will be seen, therefore, that the problem of the Empire, in considering the armed forces which are to be maintained in peace to deal with unforeseen emergencies such as the above, is world-wide and therefore not comparable with that of any other nation.

The position in 1932 may, then, be summarised thus: the first requirement of Imperial policy is peace. The expansion of trade, the exploitation of the vast undeveloped areas and resources within the Empire, the capture of the world's commercial markets, are present aims only to be secured by an unmolested period of peace. But obligations undertaken to safeguard existing treaties may not always allow of unfettered and independent action. On the other hand, to secure peace the Empire is prepared to act in unison on the side of any movement or nation working to that end. Difficulties are bound to arise: *e.g.*, the Sino-Japanese conflict divided the Empire in that Canada and Australia were both anti-Japanese in virtue of their geographical position, while Great Britain was pro-Japanese because of her old and well-tried alliance with that people.

It must be remembered, too, that in foreign eyes the British Empire is still one unit, and that isolated action by Great Britain or by a Dominion is not to be contemplated. Similarly, hostile action against any one Dominion, whatever the Statute of Westminster may proclaim, is still war against the King, and must involve the whole Empire.

It has been shown, then, that the question of the foreign policy of the British Empire must be treated as a special case in world politics, involving as it does considerations not applicable to any other country, and having aims as dissimilar.

II.—International Cross Currents.

It has been said above that the main interest of the British Empire lies in the furtherance of peace. It must not be forgotten, however, that the Empire is in the fortunate position of being the richest and strongest power in the world. We possess one quarter of the earth's surface ; untold wealth lies in areas undeveloped as yet, in many cases barely populated ; while the dominant position of our commerce and shipping is the labour of centuries. We, therefore, have much to lose and little to gain by embarking on any policy of military or territorial aggrandisement.

Such, however, is not the case with a great many of the nations of the world. In Europe alone the aftermath of the German War has left a wreckage of thwarted ambitions, strangled trade, fettered economic systems, and struggling populations for which no territorial outlet exists. Germany has lost her colonies, her rich provinces of Alsace-Lorraine, Polish Silesia and the Corridor ; Austria is having the breath crushed out of her by a ring of hostile states ; Italy is gravely perturbed to find an outlet for the overflow of her population, and does not find that France is an easy neighbour in the Mediterranean and in Africa ; the Balkans, always the powder magazine of Europe, require only the spark of financial assistance to be at each other's throats again. The United States of America, for long the dumping ground of surplus Europeans, has by a rigorous curtailment of immigration reduced her degree of usefulness in this respect to a negligible proportion.

Asia has recently provided an object-lesson in the effects of trade and population on foreign policy. Japan has admitted that her territorial limits cannot hold her increasing millions ; furthermore her economic position prior to the recent conflict with China was being seriously prejudiced by anti-Japanese propaganda. What the issue may be in Manchuria cannot at the moment be accurately forecast. The U. S. A. and Australia are barred to her ; her friendship with Great Britain and America has hitherto precluded any risk of open hostilities with these nations, but no student of history would venture to rule out the possibility. Russia, in the event of the failure of her Five Year Plan, may find herself forced into war to bolster up the credit of her communistic system, if war is not entered upon to further her commercial interests. The smaller states of Afghanistan, Persia, Iraq

and the Hedjaz may with increasing modernisation and contact with Western methods find themselves involved in armed competition in the struggle for existence.

Nor must the possibility be excluded of some new Napoleon or Jenghiz Khan arising, aflame with ambition to raise his country to a level of power hitherto unattained, or to display his own talents to an astonished world. The history of nations is the history of individuals, and the development of civilisation can be measured by the cycles of appearance of some human meteor who has raised or retarded the progress of humanity for a space of time. We cannot assume that the standardising influence of modern civilisation can be extended to the standardisation of a human type.

It must not be too readily assumed that such possibilities as are given above are the products of an imagination too easily stimulated. An age which has evolved the submarine and the aeroplane, wireless telegraphy and broadcasting, may well produce many other human developments equally astonishing, which could affect the march of history.

It will be agreed that the prospects for world peace, when candidly reviewed, present many disquieting features. International rivalries when urged by economic factors have always been the gravest source of danger. Financial exhaustion or depression at present precludes active hostility to most nations. But nations sometimes have no option in these matters, and are forced to embark on a line of action by causes beyond their control. We in the British Empire, which finished so well in the race for colonial possessions and which is now in the comfortable position of the successful business man regarding the plight of less fortunate competitors from the security of a well-furnished home, must not forget that we are the object of envy and strenuous competition on the part of many nations. To these we represent a giant guarding the entrance to the Promised Land—and perhaps, in some eyes, a giant of straw.

III. Disarmament Proposals.

Many attempts have been made throughout history to introduce a period, if not of permanent peace, at any rate of minimised opportunity for war. An example, induced as much by economic motives as by undue optimism, has always been given by Great Britain. After the wars of Marlborough the army was reduced and, under the

chloroform of a lengthy period of peace, so neglected that when next called upon to exercise its influence in a theatre of war it was quite unable to do so. The financially and morally wasteful system of hiring mercenaries had to be resorted to once again. Such disarmament as this proved, therefore, an expensive and useless procedure, which was certainly not justified.

The Napoleonic Wars found the army once more in a pitiful state. National lack of interest in the services combined with miserly financial administration had shamefully bruised if they could not break the spirit of the soldier. After 1818 when the last troops returned from the occupation of France the usual process was carried out of cutting down establishments to the minimum. Not many years passed before men began to say that the age of universal peace had arrived. They conveniently closed their eyes to such minor disturbances as the wars in India, the French conquest of Morocco, the Piedmontese struggles, and many other pacific indications. The great Peace Exhibition was held in Hyde Park in 1851. Three years later Great Britain was engaged in one of its bloodiest struggles in the Crimea. The people paid full measure for the neglect and decay into which the army had been allowed to fall, and the bitter lesson of the casualty lists, largely due to preventable causes, amply discounted the measure of disarmament adopted after Waterloo.

Longsighted men, towards the end of the nineteenth century, foresaw the inevitability of the German War, and in 1914, for the first time in her history, Great Britain entered upon hostilities with an army, too small, no doubt, but fully prepared and efficient. The previous lessons of experience show that it is impossible to pursue a line of policy without the ability to back it up by force of arms if need be. This country has always had the determination which has enabled it to carry through its policy, but it was not always a certainty that it would be carried through. Financial strength alone permitted it.

Experts may question whether the Sumerian or Babylonian civilisations were not greater and more advanced than ours: yet the eventual result was the extinction of each by force of arms. The utmost refinement in manners and culture, the height of science and education, the acme of mechanical and biological progress, are all of no avail against the sudden attack of a hostile power, determined to achieve a greater position in the world. Qualities such as those

instanced above may assist in staving off the blow for a brief period, but lack of preparation against a possible evil cannot be remedied every time after hostilities have begun.

It will be admitted, then, that what is chiefly desirable is disarmament of the spirit of aggression rather than a demobilisation of men or the "scrapping" of ships and weapons. But in view of the imperfect nature of humanity in general, it is perhaps advisable to begin with tangible propositions.

The Treaty of Versailles in 1919 inaugurated the League of Nations, which is not yet, however, a league of all the nations. The United States and Russia are the most notable absentees from its councils. The Disarmament Conference embraces a wider scope, since the delegates include representatives from States which are not members of the League. The chief difficulty in the execution of any international agreement made at the Conference and ratified by the respective Governments appears to lie in the lack of any guarantee that the measures decided upon will be carried out by every country. As far as the League of Nations is concerned, pressure may be brought, as is known, upon members to fulfil their obligations; such action, however, cannot be undertaken with regard to non-members.

This matter is one of very real difficulty; for the whole question of disarmament may be summed up in the word 'Security,' and any nation might feel disinclined lightly to discard its powers of effective defence when such action is not general and simultaneous.

The Treaty of Versailles, while reducing the Central Powers to a condition of military impotence, did nothing to impede the victors from maintaining or developing their armed forces as they wished. The signatories to the Treaty, however, subscribed to the principle of a reduction of armaments, a reduction which it was to be "one of the first duties of the League of Nations to promote."

Since 1919 little has been done except as regards naval disarmament. In this respect a marked advance was made in international relationships by the demilitarisation of a zone in the Pacific Ocean and Far East, within which no further fortifications may be constructed, and by the proportional regulation of the size of the fleets and warships of the Great Powers. As regards land and air forces, in most cases an increase rather than a reduction has taken place. But the Preparatory

Commission for the Disarmament Conference which concluded in December, 1931, produced a Draft Convention upon which the Conference which assembled in February, 1932, would be enabled to base its work.

In addition, the Conference in session has had before it a number of proposals, made by different countries, which vary considerably in principle and plan. Although these proposals are fluid, being the subject of discussion during the summer, the relationship of Disarmament to Imperial foreign policy must vary according to the degree and nature of the former. Before we can consider the effect of one upon the other, we must briefly summarise these proposals.

Naval.

1. Extension of scope of Washington and London agreements.
2. Abolition of submarines.
3. Reduction in size of warships and naval guns.
4. Abolition of capital ships and aircraft carriers.

Military.

1. Abolition of chemical warfare.
2. Limitation of effectives by most practicable course, not necessarily ruling out conscription.
3. Abolition of heavy guns above a certain calibre.
4. Abolition of tanks.

Air.

1. Protection of civilians against / Abolition of } aerial bombardment.
2. Abolition of military aircraft.
3. Internationalisation of civil aviation.

General.

1. An international Police Force, or League Army, with the control of heavy bombing aircraft, long range artillery, large warships and heavy submarines.
2. Total disarmament.

Such, in outline, have been the principal proposals put forward, some of which, if carried into effect, may very vitally influence the well-being and safety of the Empire. The variations of this aspect of the situation must now be considered.

IV. The Proposals and the Empire.

Naval. It has been continuously pointed out, that the warship most suited to our needs is the cruiser. As was shown above, our communications, under which our trade routes are included, are world-wide and therefore unlike those of any other nation. Our ability to reinforce any part of the Empire, no less than the route by which our food supplies reach Great Britain, must be secure. With the ability to despatch troops to any part of the world in safety, there is the means of striking a rapid blow in the maintenance of our foreign policy. Examples of this have already been given.

The necessity for fast cruisers on our part is, therefore, obvious. The day of the heavily armed capital ship has passed, if indeed a case for its necessity could ever be claimed in the light of our war experience. Nor do we require submarines, which, in the hands of a determined enemy, are a grave menace, to our trade routes and convoys. But conflicting interests are likely to cause these weapons to be retained.

We may say, then, that the naval proposals for disarmament, provided our cruiser strength or tonnage be not further restricted, will not affect our policy.

Military. There is a considerable danger here, that the Conference, in seeking to render war less horrible and more difficult to begin, will have made it cheaper and at the same time rendered it more difficult to reach a decision on either side. The proposed abolition of so many effective weapons spells another deadlock such as was witnessed in France from 1914 to 1918. The abolition of chemical warfare, almost universally subscribed to, deprives every nation of the disposal of a humane weapon, properly used. The abolition of tanks deprives an army of the only method by which it could, in modern war, compete with hostile fire power and gain a decision. It is futile to class tanks and heavy guns, as weapons of offence and so to deprive both attackers and attacked of their most effective weapons. The defenders will then be at the complete mercy of any attacking state which has devised a new weapon, which history shows as the answer in such situations.

As regards Great Britain, the instrument for the execution of her foreign policy, should such be required at any time, becomes immeasurably weakened. We have not a large army, and therefore it must be all the more mobile. To deprive the Army of tanks, apart from the increased casualties which would result in war,—(this aspect does not

appear to have been considered at Geneva)—is to increase its difficulties. Firearms and weapons generally are becoming increasingly efficient and armoured mobility as a protection as well as a means of avoiding utter stalemate has become a complete necessity in modern war.

There are other aspects attached to the abolition of tanks and heavy guns, but it would be irrelevant to discuss them in this essay.

As regards limitation of personnel, a reduction below present establishments would place the British Empire in the position of inability to honour her treaty obligations should the necessity arise, and is referred to later.

Air. Whatever decision is reached by the Conference in regard to military aircraft, the fact remains that the aeroplane has proved itself a necessity not only as a link of Imperial communications, but as a cheap and useful means of warfare. Iraq and the North-West Frontier of India have shown what effect aircraft can have in controlling large areas, in reinforcing threatened points, in supplying troops with food and stores, in the evacuation of personnel, including wounded and women, apart from their uses as a means of aggression, such as an aerial bombardment. The effects of the latter are often not as violent as perhaps is claimed. While there can be little objection to placing the bombardment of open towns or the civil population as beyond the bounds of civilised warfare, the aeroplane must remain a weapon of war without which we, with our special conditions, cannot guarantee the peaceful maintenance of our policy. It must not be forgotten that the moral influence of an air squadron, like a warship, can be of incalculable value in the prevention of hostilities before a dangerous situation becomes definitely beyond control.

In regard to aircraft generally, it must be remembered that the lead in civil aviation established by Great Britain is due to its control by a Service Ministry, and that it is through military aviation that the notable advance in flying reliability has taken place.

General. Theoretically speaking, an International Police Force, made up of proportionate contingents from all the Powers, and having at its disposal the only heavy bombing aircraft and long range artillery in existence, backed up by the only large warships and submarines, the whole controlled by a League Council, must be able at any time to crush resistance and punish any offender against the peace of the world. When coldly examined, however, the practical difficulties are seen to be incalculable in their effect. How will a Council make

rapid and clear decisions? How enforce them when made? How are international jealousies to be curbed, international sympathies and prejudices suppressed, so that the League army will work as one? It is possible to visualize a hundred difficulties. If the plan were workable, then its effect, so far as the British Empire is concerned, would be beneficent, for the main interest of the Empire, as already stressed, is peace.

That Total Disarmament lies within the range of practical politics at this stage in the world's development is an idle dream, and need not be discussed.

V. The Future of our Foreign Policy.

The two issues before the world to-day are those of War and Peace. As emphasized more than once already, the foreign policy of the Empire is based on the maintenance of peace. Any form of disarmament which conduces to a continuance of peace and the unhindered development of modern civilization is welcome to us. But it has been seen that some forms of disarmament would weaken the Empire and by so weakening it would render it less of a force for peace than it is to-day. Just as the law is generally respected because of the police which are maintained to enforce it when necessary, so it is essential that our position in the world, our policy and our aims, should be respected because maintained by a force not only strong enough but capable of executing its function when called upon to do so.

Again, the proposals that have been made at the Disarmament Conference are based upon the establishments and weapons which are known to be in existence to-day. But the greatest weapon of war—surprise—cannot be dealt with. It is possible to remove so-called aggressive weapons from the permitted list for armies: but a state intending to attack its neighbour may, and probably will, devise a new aggressive weapon, and the last stage of the disarmed nation will be worse than the first. One cannot disarm Surprise, or Necessity, well known as the Mother of Invention. This is a point which we cannot afford to overlook.

Situations may arise in the future for which the forces of the Empire, as regulated by the Disarmament Conference, may not be of sufficient strength. The close and constant co-operation of the Committee of Imperial Defence and the Foreign Office is required, that time may not be lost by the necessity of referring matters to an International Board of Arbitration which would possibly not deal with them in sufficient time to be of use.

History shows that disarmament in the past has not availed to prevent us from going to war when the necessities of our policies required us to do so. We cannot to-day rule out the possibility of war, although the Locarno and Paris Pacts have immeasurably strengthened the cause of peace. Moreover, in the last hundred years we have, as a nation, generally avoided alliances or entanglements binding us irrevocably to intervention in the disputes of other nations; to-day, on the other hand, we have obligations which might quite easily lead to our participation in a conflict not immediately concerning us. In this connection one should bear in mind the gradual formation of two camps in Europe, which has been in progress since the German War. On the one side stand France, Poland and the Little Entente, pledged to the maintenance of the existing Peace Treaties. On the other side are Germany, Hungary, Italy and those countries whose claims to a revision of the Peace Treaties have been by many admitted as just.

Great Britain, it must be recognised, holds the Balance of Power. She is pledged with her late Allies to uphold treaties. Her sympathies and influence might bring about the peaceful revision of the latter. Meanwhile, her foreign policy must be based on the dual requirements of peace, and friendship with all nations. Should her armed forces fall below the strength requisite to an influential voice in the councils of the world, her policy cannot be supported and disarmaemnt to this extent would spell impotence, with the consequence of disaster.

Contemporary history shows the dangers (as much as the advantages) of immediate disarmament, unless carried out faithfully by all nations of the world. But how is this to be ensured ? Those nations which have lost the most in the last war may well feel that another appeal to arms cannot produce more intolerable conditions than those under which they now live. They may regard disarmament by the major powers as a Heaven-sent opportunity to improve their present circumstances. Nor can we yet say that all wars are necessarily evil. They have been fought, may yet be fought, for great ideals. Nor do the feelings of humanity invariably coincide with the dictates of policy.

We may conclude, then, that disarmament for the British Empire beyond the present scale is not a justifiable action, in that the Empire, which is to-day the greatest force for peace in the world, might not then be in a position to exert its authority in the maintenance of that peace.

PRE-WAR.

BY "MOUSE."

("*In the days before the war, my boy, the regiment was a wonder; we wore full-dress and the officers knew sword drill; we played polo, we entertained Lord Curzon, who gave me these cuff-links; we spoke the vernacular of our men—(Ho! Khitmagar. Bring some more whisky-soda and jaldi lao, tum.)—I used to know Pushtoo and Punjabi. We didn't waste our time and money going to dances and buying motor-cars. When we did dance we used to take four collars and another shirt. We shot tigers; we stuck pig; we never drank cock-tails—(Ho! Khitmagar. Kis waste the whisky-soda not bringing?)—those were the days, my boy, those were the days. Bungo!*" Extract from the conversation of a pre-war officer bent on the improvement of my mind after dinner.)

This is not going to be one of my serious, uplifting articles. I am for the nonce going to take sides with the junior officer and try to express some of his feelings; those feelings, beliefs and impulses which antagonise his seniors and which often lead to misunderstanding between them. I may be extravagant, I may be unfair, but I will try to be truthful, and if I succeed in making some senior officers laugh at themselves and thereby flex their heads to a more tolerant view of their juniors I shall have accomplished my object. Years of service have taught me that there is nothing really wrong with our seniors, except their age.

There is a thing called "The Pre-war Tradition" that gets my goat. It is a mixture of Victorianism and perverted snobbishness born and bred in those spacious days when the Army was at the peak of its social and political importance. Those days are no more, but the tradition still lingers. Mark you, I am not decrying the traditions which make the Army what it is. I grant whole-heartedly that the magnificent histories of the British and Indian Armies must be preserved with the most religious and rigorous fanaticism; I grant that those armies can now afford to cock snoops in respect of training and discipline at any other forces in the world; I grant that we are all devilish fine chaps, but.....My grievance is far less important and yet looms daily on the mental horizon. I don't like being button-holed by some elderly military officer who

was at Sandhurst at or even before the date that witnessed my birth, and being told by him that: "We never did *that* before the war, my boy." By "that" he by no chance ever means a purely military evolution or a question of tactical training. No, it is always something far more hideous. Like drinking a vermouth before dinner, or riding a motor bicycle or wearing a white waistcoat with a dinner jacket. The more one listens to senior officers the more one realises what amazingly fine fellows they must have been when young, and what low little worms we all are. Although I am aware from my researches into psychology that this superior attitude is a normal result of advancing years and that I too, in fifteen or twenty years, will succumb to the same ailment, nevertheless I feel that the present generation, who grew middle-aged in the maelstorm of the war, deserve consideration from their elders and begetters.

Our seniors were damned lucky. They lived their soldier's life in that halcyon period between the Boer wars and 1914. The profession of arms for seventy-five per cent. of its devotees was a pleasant diversion between shooting goals off horses and tigers off elephants. England experienced unexampled prosperity and prestige throughout the world. Her Government did not always appreciate the growing menace of Germany, but fortunately there were forces working in the background to forge her small army into a perfect instrument. The handling of that instrument in the initial stages prior to its embarkation from England might have been better done—(unhappily Mr. Churchill was at the Admiralty and I was at school at the time,)—but its wonderful development and its sheer indestructibility are now the greatest marvels in English history. I can never make out, even from our official Historians, how much this was due to the brilliance of our Generals, the statesmanship of the British Government, Mr. Lloyd George, or the British soldier. Personally I think they were all very lucky, and privately I think they all owe a lot to the obscure platoon commander.

The final results of the Great War, disregarding the results which might have been if we had lost, are:—

(1) An impossible debt to America.
(2) The alienation of the Irish Free State, Egypt and India.
(3) The growth of the hideous thing, Democracy.
(4) The reduction of the British Navy.
(5) And now, a ten per cent. cut in my pay.

Indeed, the only sound thing that the war seems to have produced is the Manhattan cocktail. And yet, in spite of this dismal reckoning you find pre-war officers going about boasting of the good old days which engenerated these lamentable results for their sons and daughters. I do not for one single split second wish to blame soldiers for these pathetic results. I have read far too many of those nauseating debates in Parliament not to understand that the average senior general has a devilish hard roe to chew. (The House of Commons ought to have two hard-bitten soldier permanent members—one a Gunner and the other a Cavalryman, for these arms have a greater exuberance of language—whose job ought to be deliberate interference in service debates.)

But what I do wish to say most respectfully is, why do pre-war soldiers assume infallibility? They do not intrude this attitude militarily, for they now realise that such puritanism has only one decoration—a bowler hat—but they do insist on it socially and almost regimentally. Surely this is an absurd anachronism. I do not profess to have complete faith in my arguments and I am writing them mostly for my own amusement, but there are so many *jadoos* in Indian regiments particularly, so many religious rites and so many minor tyrannies imposed by the pre-war generation that I think it is only right to give them expression :—

(*i*) Ceremonial Parades.
(*ii*) Mess Regulations.
(*iii*) Horses.
(*iv*) Social Customs.
(*v*) Entertainments.
(*vi*) Motor Cars.

Ceremonial Parades. Bang! Twice a year every Indian infantry regiment undergoes the supreme and futile torture of a Ceremonial Parade. Prior to the auspicious event it suffers the valuable refinement of practice parades. Irrespective of the fact that half its complement may be engaged on the arduous guard duties that fall to the lot of every battalion on either internal security or frontier service; disregarding the different duties performed by an infantry unit in the plains and, say, a Gurkha unit in its quiet hill station; and supremely indifferent to the exigencies of our complicated modern training, what do our pre-war soldiers expect? They invite all their lady friends and give them awnings and car parks and then convey

all the words of command to the harassed infantry by the dipping of a flag over a horse's ears. The wretched soldiery comply with the various requests to the best of their ability and are enraged at their sheer inability to put up a Guardsman performance. It is not their fault. The Guards are not expected to furnish nine guards, three inlying picquets, four fatigue parties and a patrol on their officers' wives with the temperature at 120° in the shade. I do not for one moment say that our pre-war officers insist on Guardsmen's precision, but why are they so huffed when they don't get it? The two annual ceremonial parades are a survival of those old days when soldiers in India could afford to spend their time in carrying out those Victorian evolutions designed to satisfy the multitude and based on the tactics of Inkerman and Waterloo. They now destroy the Christmas holidays of overworked officers, and in the hot weather lead to many men using intemperate language. Why does not somebody with a p. s. c. mind evolve a simple, dignified parade which will show equal precision, equal arms drill and equal discipline without the present hurting of every modern soldier's feelings?

Mess Regulations.—"An officer's real home is his mess," a senior officer once said to me, and then, when I dropped a trick at Bridge, asked me in exceedingly Victorian language why the hell I had trumped his ace. I replied that I had been thinking about the Staff College, and then had to spend the next two months going about like an archangel so as to obtain a satisfactory confidential report. Mess life in India is not homely. The paucity of officers, the large overhead expenditure, the extra pettifogging given to the officers on the mess committee, the parade dinner with all its attendant courtesies and Elizabethian refinements—it is no more like home than a Y. W. C. A. social. No wonder that the Indian Army is given to early marriage. The average pre-war officer thinks that if he gives a mess concession to his juniors—such as dining in a dinner jacket or allowing him to leave the table before the decayed wine has been circulated nine times,—the whole discipline of the regiment will collapse. I don't know why this apprehension exists unless it is that the pre-war officer was accustomed to drink more red wine than we young fellows can afford. Ordinarily in mess there is far too much formality, often too much "shop" and generally too much obsequiousness. For Guest Nights certainly bring up all your blood-stained history, your historical formalities, your regimental customs and your ruby

wines—but for the love of modern democracy let your ordinary meals be family parties where Second Lieutenant Snooks can dispute a point as easily and as courteously with his Commanding Officer as he would with his own father.

Horses.—The spring and genius of our army are in the English countryside and English sport of half a century ago. And the Golden Calf worshipped by our High Priests—mostly cavalry—(one of these days I am going to write about the Cult of Cavalry, or the Worship of Mammals and then there will be stars in my firmament and hoof marks on my fundament)—as I say, the Golden Calf worshipped by every aspirant of military glory and every sycophant of military nepotism is that ornamental but expensive locomotive, the horse. I don't want to be low, or hide-bound, or horizontally confined, but I would like to know why every soldier who wants to get on has, first of all, to get on a horse. The number of chaps at the Staff College who spend two miserable years being horsey so as to satisfy the Moloch of all the Mammals has got to be counted to be believed. (They know of course that it is a well invested penance, for the remainder of their service will be spent in upholstered limousines).

Judging from these bitter remarks the reader may think that I am in the Royal Air Force or the Royal Tank Corps, services whose contempt for mammals or camels is well-known. If I were an airman (the only difference between an Airman and a Cavalryman is that one of them has a good market for part-worn plugs)—I also would spit on horses. I would say thus to myself; "Here I am up in the air with a range of vision, manœuvre, and power of offensiveness unrivalled by any land-bound forces. I can go across country, jump fences, and achieve spectacularity; I can do everything the Cavalry do except pin butterflies or the enemy to his ground. With me up in the air, with my enhanced visibility, my bombs, my cameras and my roaring engines I can ensure and demand victory so long as the infantry forces protect my base. The Cavalry—Pooh!"

If I were a Tank officer—(the only difference between a Tank and a horse is that one needs elaborate seduction and the other a gentle tickle)—I would also distend my exhaust upon all quadrupeds. I would cock my beret over one eye and say: "To blazes with the prehistoric fauna of Marlburian days. These fox-hunting squires, these gaitered yeomen, these be-spurred generals, and these polo-playing exotics—why should they impose their antique whims and pre-

ferences upon the organisation which in this age of mechanisation is the only logical, the only necessary, and the only perfect instrument of war? The airy way these cavalry conservatives talk gives me prickly heat; thank heavens for Fuller's Earth. The Cavalry—Bah!"

Thus and thus would I talk if I held rank in either of these arms, even as they do. Unfortunately I belong to the lowest type of military life—the Infantry. I am an untouchable; nobody dare touch me for a fiver, and I dare not, alas, touch anybody either. I spend my life walking on legs too short for cavalry and on feet too big for clutches and accelerators. Yet, in spite of my grotesque appearance, my aversion to horses expressed in my written and signed preference for infantry as a cadet and my strained circumstances, I find that one of the greatest essentials to the advancement of my military career is horsemanship. All my military life it has been impressed upon me that to be an efficient officer one must have a horse. I have always had a horse, but it has struck me as extraordinary that the authorities who insist on these principles and these conceptions of soldiering insist with equal forcibility that an infantry officer is not entitled to a horse until he is a company commander. When one is thirty-six years of age or older it is not the time to gallop into Olympia and make one's equestrian bow. If a horse is a necessity for an infantry officer—which I fully grant it is—he ought to have one from his first infantile pip. The cavalry officer gets every encouragement to improve and extend his horsemanship; line ponies, orderlies, polo tournaments, the bliss of three months at Saugor, and the balm of Gilead or Girth gall, but what of his foot-slogging brother? He gets an indifferent remount or buys a perambulating screw; he tries to hunt on an untrained charger or to play polo on a couple of pensioned bazaar tats, and, just because he falls off on a New Year parade in front of the grand-stand, his regiment is for ever blasted by the General who comments—"The officers need more training in horsemanship."

The dice are loaded against the infantry officer; he has got to be able to march, to direct artillery fire, to co-operate with tanks, to observe from aeroplanes and to sit on a horse and be veterinarysurgeon to mules. He has also got to win the war and sit on it when it is won, and after all this standing and sitting he invariably collects a raspberry from some senior officer because the tails of the mules of his Machine Gun Company are trailing below their hocks. It's a bit hard.

After all this tomfoolery I would like to say that I do like horses for their own sake. I have a few, none of which I am entitled to and none of which, *cela va sans dire*, I can afford. But we are like that in the infantry - dashing. The Cavalry - pish!

Social Customs.—An officer gets no married allowance until he is thirty; a private soldier until, mark you, he is twenty-six. Why? I am sufficiently conservative not to get socialistic at this proletarian decision regarding the respective amativeness of the classes, but upon my Sam, I don't see why the pre-war tradition regarding the Age of Consent for officers should be enforced in the present enlightened age. The pre-war feeling is against early marriages because wives and families add burdens to administrative arrangements. The fact that such sentimental liaisons are normal biological phenomena common to all strata of humanity is lost upon the Victorian hierarchy who rule us, and who were brought up to believe that such connections should be arranged by Mama, Papa and God, all in their own good time. I admit that if I were a commanding officer I would prefer that all my officers were bachelors because then I would probably have them always on the tips of their toes for service and hard-work, but if ever I did command such a unique collection in India I would not be surprised to hear that they were all eunuchs. Some psychologist ought to examine the causes for so many young officers in the Indian Army being married. An inhospitable country, home-sickness, mess-sickness; and, as the Prayer Book says, "a remedy against sin." I do not profess to know, but I do think that the pre-war soldier who damns so fiercely and so volubly the present matrimonial tendency might well dig into his own conscience. I would hate to examine the *debris*.

Entertainments.—In the pre-war days they entertained. They exercised the human faculties for giving and receiving pleasure to and from their guests. They dined them and wined them. They gave them champagne, chartreuse, marsala and all those other drinks with which I am not acquainted. They gave them buggy rides. They gave them tremors, fits and spasms. They gave them fun and fashion.

We are too poor to do that. Instead of the ten course banquets, the truffles, the *pate de foie gras* and the tinned asparagus we give them sausages and eggs and bacon. We cannot afford the rich sherries, and so we tempt them with cheap continental vermouths disguised with lemon and bitters to hide the taste and decrease the cost. (We call them cocktails). We give them honest whiskies and sodas and achieve the same results. We kiss the girls too, but our amours rarely

lead to scandal. And we don't wear long moustaches and we don't pretend to be archangels.

Motor Cars.—Nothing enrages my official fathers so much as the sight of a motor car containing me. " In my day," they say, blowing up their chests in a vain attempt to deflate their diaphrams, " we never had motor-cars. We were content with a horse, a buggy, a brake, a railway train or an ox-wagon." And then they look at me as if I were a Maharajah expending all the tribute of my subjects in a fleet of Rolls-Royces. Actually, I may be giving a lift to our Second-in-Command who has got four children at school and wants to teach me my profession by way of a T. E. W. T. ten miles from cantonments. Being a bachelor I can afford a Ford and am only too glad to save my brother officers unnecessary fatigue. This pre-war hostility towards motors is really rather ridiculous. A car is not a luxury now ; in India it is an economical necessity. From the professional point of view, an officer living in Army Mansions (because he cannot afford to compete with the growing class of Indian which is invading the security of cantonments) must have a car. He is separated from his barracks by three, five, seven miles. He has to appear on morning parades, and then at office, and quite frequently again in the afternoons. According to the pre-war conceptions of locomotion he ought to walk, ride, bicycle or use a tonga. Being modern he buys a dud car, and spends the remainder of his service lying awake wondering if the thing will start ; and Generals call it a limousine. I have done the walking, the riding and bicycling (I could not afford the tonga) and I know how very seriously my efficiency was impaired. I used to sleep for hours and hours in office. The modern junior officer is worked far harder than his seniors were. He has not the time to idle about cantonments on a slow horse ; he cannot afford the luxury of a tonga and he likes the fun of driving a car or riding a motor-bicycle. If he abuses the privileges offered to him by the conveniences of modern methods of transport by occasionally using his vehicle to take a pretty girl for a ride—well, point me out the general in the whole British Army who is not sorry he had only a tonga, or a bullock wagon, or a tandem or a hansom for exactly the same purpose.

In conclusion I would like to state that I notice a great deterioration in the class of young officers now being produced by our military colleges compared with what they were in my day.

DARDISTAN.

By Colonel H. L. Haughton, C.I.E., C.B.E.

After an interval of nearly forty years another attempt has been made, this time by a German party, to reach the unconquered summit of Nangaparbat, that magnificent peak of nearly 27,000 feet, the western buttress of the Himalayas, round which the Indus sweeps to make its final turn southwards. The distant view of Nangaparbat is well known to many in Northern India, for it so dominates the mountains around it that it is possible to see it, not only from comparatively short distances such as from Gulmarg, but also on clear days from certain vantage points near Murree, Nathiagali and even from the Peshawar Valley. Not a few also know well the country lying this side of the great mountain and the approaches to it; but it has been suggested that readers of the Journal may be interested to hear something more concerning the country in the immediate vicinity, and of the people who dwell there.

The best known line of approach to the Gilgit Agency, in which Nangaparbat is situated, is from the Kashmir side over the Tragbal or Rajdhiangan Pass down into the Gurais Valley, and up again over either the Burzil or the Kamri Pass to Astor, and thence down into the Indus Valley beyond. Nangaparbat may also be approached from the Khagan side and the lower Kishenganga Valley by the Babusar Pass, which leads one to Chilas. There is another, but little used, route over the Mazeno Pass leading into the Indus Valley at Buner, between Bunji and Chilas; but this latter pass is so little used that further reference to it may be omitted. There are of course other routes leading into the Gilgit Agency which may be briefly mentioned —that from Chitral *via* Shandur Pass through Yasin to Gilgit itself, and the Central Asian route from the North-east *via* the Killik or the Mintaka Pass through Gujal to Hunza and thence down the valley of the Kanjut stream to Gilgit.

The route *via* the Gurais Valley and the Burzil is the best known and is the one which has been in general use from the earliest days, when the forces of the Sikh and Dogra rulers of Kashmir were endeavouring to keep a precarious hold upon part of that country which now forms the Gilgit Agency. The road is good, and in summer there

is no difficulty in crossing either the Burzil or the Kamri Pass, but this has not always been the case and men in Kashmir may still be found to speak of the horrors of the Burzil and the Gilgit road in early days, when the Kashmir troops depended upon forced cooly labour for all their supplies. On the Hattu Pir, round which the old road, if road it could be called, passed down to the Indus Valley at Ramghat, hundreds of those wretched coolies, ill-clothed, ill-fed and over laden, met their deaths from starvation and disease, until the place became a perfect Golgotha. In these more enlightened times, supplies for the Gilgit garrison are carried up yearly by hundreds of ponies, which are collected at Bandipur. As soon as the passes open, all ponies are carefully inspected by the transport officer in charge, and all weak or sore-backed animals are discarded so that the minimum suffering is entailed.

The Burzil and Kamri Passes are both between 13,500 and 14,000 feet altitude, but the Burzil generally opens earlier than the Kamri, as it seems to hold less snow. Given fine weather, there is little difficulty in crossing either of these passes, and a single man or parties of a few men lightly laden might cross during any month of the year. All the same the Burzil is reckoned to be a pass of ill-repute, and from time to time has been responsible for a considerable loss of life. In 1891 a party of Gurkhas proceeding to Gilgit was caught by bad weather on the pass and suffered many cases of frost-bite, and in the spring of 1907, the coolies, who were accompanying two officers on a shikar expedition, were caught by an avalanche and twenty-two of them were buried alive.

From Bandipur to the Burzil, the country is as beautiful as any to be found even in Kashmir. Magnificent forests of spruce and silver fir clothe the slopes on the mountains leading up to the Tragbal. The Tragbal Pass itself is perhaps unrivalled for the profusion of wild flowers to be found at certain times of the year. In the Gurais Valley at an altitude of about 8,000 feet grassy slopes and dense forests, broken by towering precipices on either side of the rushing Kishenganga lend an air of prosperous fertility; but actually the people of the valley lead a hard life, as the ripening of their crops at such an altitude is a matter of great uncertainty—in fact only certain hardy crops will ripen at all.

It is interesting to note that these people of the Gurais Valley are not Kashmiris but are Dards speaking the Shina language, of whom

more anon. Once the Burzil is crossed, the country changes. It cannot be said to be actually treeless, as it is practically true to say of the north side of the Zojila, for small stretches of forests do exist ; but generally speaking, on crossing from the south side to the north side of the range, one passes from a forest country into one of bare open hills.

The Gilgit Agency, in which Nangaparbat is situated, comprises a large part of the country often spoken of by the general name of Dardistan, and which includes many small States such as Gilgit, Astor, Hunza, Nagar, Puniyal and Yasin. It is a country which can perhaps best be described as stupendous. To some people it is very beautiful, with a hard almost awe-inspiring beauty of its own ; to others it is forbidding. The passes close behind them like vast doors cutting them off from civilization and all the normal amenities of life ; the vast mountains oppress and hem them in like prisoners in the narrow valleys ; to them the very grandeur and vastness of nature become terrifying. One can quite imagine that something such as this must have been the feelings of the unfortunate beings, who in early days were sent to penal servitude from Kashmir, and pushed across the Indus to fend for themselves. Many of these wretched Kashmiris were seized upon by Chilasis or people from Hunza and Nagar, and were sold into slavery in Chinese Turkistan ; but some managed to settle down, inter-married with low class people of the country, and their descendants may be found in Gilgit to-day. They are now hardly to be distinguished from the true natives of the country, and one man to whom I talked seemed to bear no ill-will on account of the punishment which had been meted out to his grandfather. I enquired what was the crime for which he had been transported, thinking that it might have been for killing a cow in Kashmir ; but I discovered that the culprit had been a butcher in Srinagar who had been caught out selling dog meat and calling it goat ! His grandson seemed to regard it as quite a good joke.

Perhaps the most curious convict that ever came to Gilgit was a cat. This cat, when rambling over the roofs of Srinagar, dislodged a tile or a piece of wood which fell upon a child's head and killed it. The cat was caught, tried and on being sentenced to transportation for life was taken up to Gilgit and pushed across the Indus. The delightful old Dogra General, who commanded the Kashmir troops in Gilgit when

I was there, told me the story and assured me that the cat, which must have been a lady, had many descendants still living amongst the cat population of Gilgit.

One more word only regarding the scenery. I have already described it as stupendous, even awe-inspiring, and this appears to be the impression it made upon the old Chinese travellers, who passed that way upon their pilgrimage to the Buddhist shrines in India. For it is of this country that Fah Hian writing in about 400 A. D. says "steep crags and precipices constantly intercept the way. These mountains are like walls of rock, standing up 10,000 feet in height. On looking over the edge, the sight becomes confused and then, on advancing, the foot loses its hold and you are lost." Another pilgrim, Sung Yun, writes "for over a thousand *li* there are overhanging crags 10,000 fathoms high, towering up to the heavens."

It is indeed a land of mighty peaks and deep, dark gorges, and it is said that within a radius of sixty-five miles from Gilgit, there are to be found, among a mass of innumerable smaller peaks, eleven of from 18,000 to 20,000 feet, seven from 20,000 to 22,000 feet, six from 22,000 to 24,000 feet, and eight from 24,000 to 26,600 feet. Everything is upon a vast scale. At times perhaps, standing upon some lofty spur, one's eye lifts from the sombre depths of the narrow gorges beneath to the sparkling snow-clad peaks above, silhouetted clear, sharp and silent against a deep blue cloudless sky. On some other day one may have the misfortune to crouch behind a rock for such poor shelter as it gives, whilst lightning flashes and thunder rumbles around one, a biting, wind-driven rain lashes the face, the roar of avalanches of snow, rocks and earth crashing down the mountain side rivals that of the thunder itself, and the clouds and mist whirl and writhe in a frenzied dance to the whistling of the tearing, shrieking wind. Then indeed does civilised man feel that he is but a puny creature and understand the superstitions of the untutored hillman who dwells in such surroundings and "sees god in the clouds and hears him in the wind."

Now let us turn to a consideration of Dardistan, and see if we can define what is meant by this term. Who are the Dards? Over what area do they extend? These questions, though they appear simple, are not by any means easy to answer. Dardistan, as we now understand the term, comprises the whole of Chitral, Yasin, Puniyal, Gilgit,

Hunza and Nagar, Astor, and the Indus Valley from Harmosh to Batera, the upper reaches of the Panjkora river and the Kohistan of Swat. The Indus Valley section may again be divided into two main portions—the upper portion being called Shinkari, or the country of the Shins, including Gor, Chilas, Darel and Tangir, and the lower portion generally known as the "Kohistan."*

It is probable that in early times the Dards covered a very much more extensive area than they do at present, for they appear to have been sufficiently well known to be classed as an important tribe by ancient writers. They are mentioned in the Vishnu Purana and also by Arrian, who speaks of the Dardai, "who inhabited the mountains towards the eastern borders." Ptolomey also speaks of them as living "at the sources of Indus," and Pliny, referring to the gold still to be found in some quantities throughout the upper Indus Valley, writes "*Fertilissimi sunt auri Dardoe.*"

It will be noticed that Chitral has been included in Dardistan. The mass of the people there are Kho, speaking a language called Khowar, but the ruling families are Ronus, who are still the most honoured caste amongst the Dards. It is justifiable to think that Kho people themselves were at one time more widely distributed than at present if, that is to say, there is any connection to be traced between their name and approximately the same syllable which is to be found in the ancient names of rivers, such as the Khophen, the Kunar and the Khoaspes.

The Dard people in the Gilgit Agency may, broadly speaking, be said to be divided into three castes. After the ruling caste of the Ronus, already mentioned, come the Shins, and below them the Yeshkuns, and lastly a collection of low castes, such as Kamins, Doms, etc., who provide the millers, potters and musicians of the community. It is interesting to note that in marriage the Shins will give their daughters to Ronus and the Yeshkuns to Shins; but a lawful daughter is never given to a man of lower caste. This, and the whole caste system, seems to denote a close connection with Brahminical Hinduism.

It is impossible to deal in any detail with this difficult matter in a paper of this sort, but there are reasons for thinking that whilst the

* There are still one or two small colonies of Dards tucked away in the most remote valleys of Baltistan where they have maintained until this day their own language and customs in the midst of the Tartar population which has swamped them out of most of the country.

Kho people of Chitral may fairly be considered very early if not the actual original inhabitants of the country, the other Dards swept up from the direction of the Punjab in later times either completely submerging the aborigines, or driving them and the remains of previous waves of invasion into the inmost recesses of the hills. The first of these waves appears to have been Yeshkun and the second, Shin.

It is said that there are no less than eleven different dialects spoken in Dardistan, and their distribution appears to confirm the above view of the waves of Dard invasion. In Chitral, Khowar is the language generally spoken, and it is to be noted that there are no Shins or Yeshkuns to be found there; their respective invasions having presumably spent themselves before they crossed the Shandur Pass. In Hunza, Nagar and Yasin, the Yeshkun language, known as Burishashki, is spoken, whilst Shina, the language of the Shins, is spoken throughout Gilgit, Astor, Puniyal and Gizar—the most accessible valleys in which the Shins established themselves when they forced the Yeshkuns back into the inaccessible fastnesses of Hunza, Nagar and Yasin. It has been suggested that the Yeshkuns may be descendants of the original Yuechi, those Scythian tribes who conquered Gandhara about the first century and ousted the last of the Greek rulers—Hermaeus—from Bactria.

All these people are now Mussalmans of sorts, Sunnis, Maulais and Shias, all being found within the limits of Dardistan. Apart from the historical records of the Chinese, there is still plenty of evidence within the country to-day to show that the prevailing religion must at one time have been the gentle faith of Buddha; for in numerous places the remains of stupas and Buddhist carvings upon the rocks bear silent witness to the faith now vanished and forgotten.

Curiously enough the name by which their neighbours, the Kashmiris, always refer to the Dard people is "Bhota" or "Bhota-log." The present inhabitants of the country appear to have forgotten entirely their connection with the Buddhist faith for they have no knowledge of it and take no interest in such Buddhist remains as still exist. The rudely carved figure to be seen on a rock face at the mouth of the Kirgah nullah, some three miles above Gilgit, they call "Yathini" who, they say, was a female demon who devoured human beings, but was turned into stone and fixed upon the rock by a holy man whom she endeavoured to seize.

In this legend, twisted round to suit Mussalman ideas, there may be some connection with the "Hariti" of Buddhist lore who, it may be remembered, was a similar female demon and devoured the children of others, though she is said to have had five hundred of her own. She was converted by Buddha who stole her youngest child and hid him under his begging bowl. The distracted mother nearly went mad with grief at the loss of her child, which gave the gentle teacher the opportunity he sought of making her realise the sorrow that she had inflicted upon others so that she came to be regarded as the lover and protector of children, the goddess of mercy and of fertility. The other form in which she has come down to us is as the goddess of small-pox—a destroyer of children—which title she evidently derives from the evil practices of her earlier years before her meeting with Buddha.

It is probable that the Buddhist faith gradually disappeared from the country with the coming of the Shins who certainly introduced some form of Brahminism. It is to be noted that all the Dard peoples other than the Shins apply to the latter the term "Dangarik" or "the cow people." This appears to be fairly strong evidence of their connection with Hinduism, though curiously enough the feeling for the cow seems to have become perverted in these days, for no Shin will milk a cow or keep chickens, the latter being a practice which is shared with them by most Hindus.

The existence of caste has already been mentioned and it may be added that the ruler of the Shins was always called the Ra. Again the burning of the dead was in vogue until comparatively recent times, concerning which Drew writes:—"One or two old men have told me that they could remember hearing it mentioned, as not an uncommon occurrence, in their youth, but none could recollect having witnessed any actual instance. So lately as in 1877, a very old man in Darel scandalised his neighbours by calling his sons to him on his death bed, and after having his arms and valuables brought to him, desiring to be burnt with them when dead. His wish, however, was not carried out. He and a man of Gor, who died twenty years ago, are known to have always refused to be circumcised or to call themselves Mahomedans. They were probably the very last Hindus in Dangaristan."

Behind these relics of Hinduism and in spite of the introduction of Mahomedanism, which gains strength yearly as education spreads, there are to be found many signs of still earlier idolatrous beliefs and

customs in the legends and festivals of the country. It is impossible to enter into a discussion of these in detail, but, as instances, may be noted the festival of Taleni which seems to be based upon some original form of sun or fire worship, and the general feeling of reverence for and frequent employment in ceremonials of the *Chili* tree, perhaps indicating the existence at one time of some kind of tree worship. Behind this again is to be found in the folklore of the people a wealth of stories showing how strong must have been the belief in demons, spirits and fairies, good and bad.

In this connection one cannot help wondering whether some of the difficulties experienced by the party which tried to climb Nangaparbat should not be attributed to such beliefs amongst the local coolies, who still undoubtedly entertain such sentiments though they would be reluctant to confess them. There is little doubt that about seventy-five per cent. of the local people firmly believe that Mummery and the two Gurkhas who accompanied him upon his last fatal climb were killed or carried away by fairies. That this would be the fate of anyone trying to climb the mountain was foretold, before the expedition started, by an old witch in Goona, a village towards Chilas ; and the avalanche which swept away Mummery and his two companions confirmed that belief in the eyes of the people at large.

There are few if any witches left in these days and I know not whether any of them have prophesied ill concerning the fairies' attitude towards the present expedition ; but it must not be forgotten that to the people of Gilgit "Dyarmir," as they call Nangaparbat, is the home of the fairies and on its summit is "Bathelo," the fort, the innermost sanctuary of these fairy folk, who would surely be unlikely to allow any mere man to enter it!

The failure of the present expedition in spite of pluck and perseverance will perhaps still further strengthen the popular belief that avenging avalanche, falling rock, baffling cloud and biting wind have come to the assistance of the fairies of Dyarmir and have once again rendered their fastness impregnable to the attacks of human beings.

A whole volume might indeed be written about these interesting Dard folk, their customs and beliefs, their mode of life and social organisation, their festivals, sports and pastimes ; but this paper has already grown too long.

However, at the risk of hearing somebody say " Yes, insufferably long ", it is felt that it would be almost indecent to bring the paper to a close without saying something of what may be called the national game of the country polo.

Gilgit indeed shares with Manipur the honour of being regarded as the home of polo, but, although the game has been played there for more generations than any one can remember, it is probably not indigenous but was introduced into the country from outside. Nevertheless it was from Gilgit and Manipur that we borrowed the game, naming it from the *Pulu* which, strictly speaking, is the name of the ball with which the game is played.

The game itself is generally called *Chaugan* and the ground upon which it is played the *Shawaran*. Whence the Dards introduced the game cannot be said with any accuracy, but probably from Persia from which country it spread East and West in very early days. Does not Omar Khayyam use the word *Chaugan* in his quatrain which begins—

" The ball no question makes of ayes and noes,"

" But right and left, as strikes the player, goes."

How early the game was played in Persia I know not, but Constantine Porphyrogenitos, writing about the 8th century, speaks of its being played in Byzantium and uses for the polo ground the word *Zeuganisterion* which must be derived directly from the Persian " *Chaugan*." That great leader of the Muslim hosts, who made circles round our brave but heavy crusaders and was known to us through our school histories as Saladin, was an expert polo player. Who knows but that his prowess at the game may have helped him to overcome his more cumbersome and slow moving adversaries ? As far as India is concerned the game must have reached this country well before the 13th century for was not Sultan Kutb-ud-din Aibak, the builder of the Kutb Minar near Delhi, killed whilst playing polo at Lahore about A. D. 1210!

To describe the game as played in the Hindukush to-day would be a long business and it has been done before, so it must suffice to say that the ground is any flat piece of land that can be found and usually has a rough stone wall along either side, upon which the spectators and musicians sit. There are no fixed measurements, for in a mountain country one must take what one can get, even though it be the village street!

In important matches nowadays, the players are generally six aside, but in friendly games there is no limit and anyone who likes may "chip in," so that there may be ten or a dozen aside, all playing "on the ball!" There are no *chukkers*, but the side that scores nine goals first wins and hard fought games have been known to go on without pause for two hours! The best ponies are Badakhshanis and stand about fourteen hands.

The traveller Vigne was, though probably not the first European to see the game, about the first to leave a record of having seen it and was much impressed by what he saw. Travelling between 1830 and 1840 he saw the game played at Shigar in Baltistan and writes of it as follows:—

"At Shigar I first saw the game of the *Chaugan* which was played the day after our arrival on the *Mydan* laid out expressly for the purpose. It is in fact hockey on horse back. The ball, which is larger than a cricket ball, is only a globe made of a knot of willow wood and is called in Tibeti *Pulu*. I can conceive that the *Chaugan* requires only to be seen to be played. It is the fit sport of an equestrian nation and would be, I should think, an excellent exercise for cavalry.... and I should strongly recommend it to be tried on the Hippodrome at Bayswater."

It seems to have been some time before Vigne's advice was taken either at Bayswater or anywhere else, for polo was not introduced into India until about 1860 and took longer to reach England. It is not until 1871, that we read of a great match – eight aside – being played between the 9th Lancers and the 10th Hussars.

THE PRESENT INTERNATIONAL ECONOMIC CRISIS AND THE GOLD STANDARD.

By J. B. Taylor, Esq., I.C.S.

A lecture delivered to Members of the United Service Institution of India.

It is a curious fact that, though there is nothing about which the average man is so intimately concerned as money, there is nothing about which he knows so little. The problems of money and particularly of international finance are generally supposed to be a matter for the expert, to be left to the trained handling of bankers and their like. This is all very well so long as things are going smoothly, but when they begin to go wrong it is a different matter. To all appearance, the experts have made a mess of their job, and the layman has a right to ask why, because there is no question, except that of social health, which is of more importance to the man in the street. A pestilence like the Black Death may sweep a country and decimate the inhabitants, but disorders of the monetary system may create almost equal suffering, in fact even greater suffering in scientifically organised and highly developed modern communities. The numbers of the unemployed have increased by tens of millions. People's life's savings, even when invested with prudence, have practically disappeared. International debts have climbed up to a figure where they are clearly beyond the capacity of any debtor to pay. In a desperate effort to make ends meet, Governments have screwed up taxation, cut down expenditure, reduced the pay of their staffs or retrenched them altogether, and, what is worse, there appears at present to be no real sign of a favourable outcome.

What is it that has happened? Prices have collapsed to one half of what they were six years ago and a third of what they were just after the war. This may sound exaggerated. You may reply, "My clothes, my house rent, my bearer's wages are certainly not half of what they were in 1926, and if they were, it would not be a bad thing." The tragedy is that this fall in prices is a fact. If the price of wheat or wool or cotton rises, up jumps the price of the loaf or of a suit of clothes within the week—if wheat falls it is a much more difficult

job to persuade the baker to put down the price of bread. He has a thousand excuses, he has his wages to pay, his rent is the same and so on. The fact is that people like having their pay put up and hate having it put down, so if there is a heavy fall in the wholesale prices of such things as food grains, metals and other raw materials, the retail prices will not come down nearly so quickly and the balance of things is upset. The latest statistical statement of the Bank of England bears this out. It shows that whereas wholesale prices in pounds sterling have now fallen to the 1913 level, the retail price of foodstuffs is still 25 per cent. above it and the general cost of living still nearly fifty per cent. above it. A heavy fall in wholesale prices is therefore a calamity and this is what the world is suffering from. But why should wholesale prices fall ? That is the problem which we have to examine this evening.

I have already pointed out the similarity of this crisis with some great pestilence and the analogy is close. It knows no national frontiers. There were countries like the United States of America which hoped that they could avoid the common plague, by drawing their skirts around them, by raising their tariffs so as to keep out the lower priced produce of other countries. They now find that they are suffering worse than the others. Again, as in the case of a pestilence, those countries are suffering less which are leading the more simple life, those which economically speaking are closer to the ground. India, for instance, has suffered very severely, but it has not been nearly so heavily hit as the United States, although it would be foolish to minimise the loss caused by the falling off in the price of India's staple exports such as cotton, jute, rice and tea. The gross money value of the export of Indian merchandise in the twelve months which ended last March fell to 156 crores as compared with 220 crores in the previous year. India's average annual exports for the previous ten years were worth 315 crores. In other words, the money which India gets from foreign countries for her produce is now about 160 crores a year less than it was a few years ago. When you remember that our whole national budget is only about 130 crores you will realise what a blow has been given to our finances by the collapse in the world's demand for our goods, and how impossible it is for the Government to maintain its previous standard of expenditure when the tax-payers' capacity has been so terribly reduced.

At the same time, the actual population of India because of its simpler standard of living has probably suffered less than the population of Western countries. The price of foodstuffs has fallen as rapidly as, if not more rapidly than, that of other commodities, so that the ryot has enough to eat. The people who are suffering, and suffering as badly as in any Western country, are the commercial and business communities, but they form a smaller proportion of the whole than in more highly industrialised countries.

Though we may derive a little miserable consolation from the fact that there are others who are worse hit than we are, that does not answer the question what is hitting us, and is there a remedy for it? It is sometimes said that this is a disease which must burn itself out and that it is no use trying to do anything. Any remedy which is a mere palliative may make the ultimate position worse. It is of course a truism that nature will find its own remedy. The turn must come sooner or later. This, however, is merely a counsel of despair. If this crisis is allowed to burn itself out, it may destroy in the process practically everything that is precious in our civilization and leave us to build up laboriously again from the bottom, as happened when the Roman Empire destroyed itself. What we are now suffering from is usually described as an economic blizzard. I do not like the description. It suggests a visitation of nature which is entirely outside our explanation or control, like a volcano or an earthquake. I would prefer to describe it as a world-wide epidemic, because the monetary systems of the world are factors which can be controlled, even though we may not yet have discovered how to control them. The present crisis is like a disease, the cure for which has not yet been discovered, rather than some blind phenomenon of nature. I am convinced that sooner or later the cause of this wide monetary disturbance will be recognised and isolated, and with its isolation the remedy will follow.

I do not mean by this that there may not be contributing factors, as disease is fostered by unhealthy habits of life. We have all been inclined, governments and private individuals alike, to live beyond our income. After a world-wide war, in which men and material were destroyed on a scale never before known, we had the mad illusion that we were emerging wealthier than we went in, that we could live better and work less. All this may be true, but common sense argues that there

must be a root cause for this undoubtedly extraordinary phenomenon, and though there is disagreement among experts as to that cause, I think that most of them now agree that this catastrophic fall in wholesale prices is due to the inadequacy of the world's gold reserves, as at present managed, to support the present volume of the world's trade and commerce. In other words, there is not enough gold to go round. Expressed in this bald form it is a platitude. Everybody knows it. In order to find a remedy, we must examine the problem more closely to try to find out why, and by how much, the world's gold stocks are inadequate, and whether anything can be done either to stretch them out so as to meet our requirements, or whether we can bring in anything else either to serve instead of gold or to help it out. On these, which are the really practical and important points, there is still much doubt and disagreement.

This brings me to the lines on which a scientific investigation of the problem should proceed, and here I am afraid that I must slur over the various details of a somewhat complicated theory in order to put the broad results before you. What is money? In a modern State money, from the point of view of the man in the street, is the common standard for measuring the value of commodities authorised by the State. In other words, the first essential of money is that it is the legal tender of the country, the kind of coin you have to do business in if you are in a particular country. The State, except on very rare occasions, does not fix the actual price of any particular commodity. It leaves that to individual negotiation, but it says that the price when fixed must be expressed in terms of its money. It would appear to follow from this that the State could declare anything which it chose as money, so long as the quantity of the thing was limited by nature, or so long as the State could limit the quantity itself. For instance, it would be useless to call pebbles or sea-shells money in a country where anybody could pick up handfuls of them, though they have both actually served as money in places where they are rare. Also, if a State made its paper notes money, and printed them as fast as the printing press could turn them out, their value would sink to nothing, like the rouble or the mark.

This, however, is not the whole problem because foreign trade has to be considered. The foreigner is under no compulsion when he sells his merchandise to a particular country to accept the legal tender of that country. He wants something which he can convert

into the legal tender of his own country. In order to facilitate international trade, therefore, something is required which will be universally acceptable, and gold, because of its rarity and durability, has fulfilled this function of an international medium of exchange from time immemorial, at first in companionship with silver and latterly to a continually greater extent alone. From this you will see that there is no necessarily indissoluble connection between the internal currency of a particular country and the price of gold in that legal tender. Since last September, for instance, the price of an ounce of gold in pounds and in rupees has varied considerably according to the fluctuations of the exchange with America and France, where the price of gold, in dollars and francs, respectively, is still fixed by law and remains the same. In order to facilitate international trade, however, it was soon realised, primarily by Great Britain, which has been the world's leading merchant country for the last three hundred years, that foreign trade would be enormously encouraged if a country could maintain a definite parity between the internal and external values of its currency, that is to say, that the international commodity—gold—would always have a fixed price in pounds, shillings and pence. Such a fixed parity clearly lessens the risk to a foreign trader of finding that the price in his own money which he eventually gets is less than what he originally anticipated. Equally also it makes it tempting for him to leave his spare funds in such a country because he realises that he can draw them out when he likes on the same basis on which he put them in.

So far, the argument is simple enough. The next conception, that of credit, is more complicated and it is the misunderstanding about the nature and the limitations of credit which is the primary source of the present trouble. I shall endeavour, however, to make the explanation as simple as I can. In its baldest form the proposition which I have just stated would mean that if a country wished its money to have the maximum possible stability in relation to the outside world, all its money would be gold and nothing but gold. This, however, would clearly be impossible in practice, but you must realise that every single step forward from this position brings in the conception of credit, that is to say, of one man trusting another.

For instance, there are large payments which would involve the physical transport of impossibly large masses of gold if they had to be paid in specie, and the mercantile community to avoid such remittances

introduced such expedients as payment by cheque or bills of exchange or bank notes, that is to say, promises to pay the amount of gold specified in the document if called upon to do so. At first these documents were issued by private individuals or banks on their own credit, and if you accepted a note you definitely knew whom you were trusting to cash it. It was soon found that there was a certain amount of bank notes in the case of each country which would never in practice be cashed because they were much more convenient than cash for large transactions. The amount would naturally rise and fall according to the state of business, but there would be a minimum below which it would not fall though it might be difficult to decide what exactly that minimum was. Once banks realised this, they also grasped the logical consequence, that they need not keep a sovereign for every pound note they issued, but could lend out a proportion of them in full confidence that they would never be called upon to cash every note. At this stage Governments saw that there was money in the business, and began to issue notes, either themselves or through State banks which had to pay for the privilege. The profit, as I have said, was derived from the fact that a certain amount of the notes were not backed by gold. In England before the war this uncovered amount was fixed at £18½ millions. In other words, the Bank of England was allowed to issue as many notes as it liked. These notes were declared by the Government to be legal tender money up to any amount, and anybody could present them in any quantity at the Bank of England and receive gold sovereigns in exchange. For any notes issued over £18½ millions the Bank of England had to retain a reserve of one sovereign for each pound of notes issued as a reserve against encashment. It is obvious that if any particular country either through misjudging the situation or through the desire to make profit out of the issue of its notes did not keep an adequate reserve in gold, it would have to put difficulties in the way of the conversion of its notes into gold, or even in the extreme refuse encashment altogether. In such cases it is equally obvious that the notes would circulate at a discount in relation to gold. It was to prevent this that the reserves of the Bank of England were framed on the most cautious lines, so that in practice before the war London was the freest market in the world.

I have discussed these comparatively simple developments in monetary credit in considerable detail, because the effects of further developments of credit on money, though apparently more complicated,

are really governed by the same principles. The ways in which one individual may trust another in matters involving money payments are innumerable. They also vary in degree from time to time. For instance, when prices are rising manufacturers are eager to sell their output so as to bring in fresh raw material and increase their trade. They are, therefore, prepared to give liberal credit to shopkeepers who, in turn, are eager to borrow to lay in large stocks because they see a quick turnover. Business booms in consequence; there is plenty of employment at good wages and lots of money about. Investors and speculators see that business is making good profits and that the shares of the companies concerned are rising. They are, therefore, eager to trust them with their money by buying their shares, and so the improvement goes on.

It might appear that there is no reason why such a process should stop of itself or why anybody should want to stop it. I have already told you how disastrous a sudden fall in wholesale prices in, so it might seem that the contrary, a rise in wholesale prices, would be equally beneficial. The only people who suffer from a rise in prices are those on fixed incomes or those who have invested in Government securities or debentures with a fixed rate of interest. As prices rise, since they merely get the same amount of money, that money is able to purchase less. On the other hand, though they do not benefit so quickly as the merchants, they get their benefit in time. People on fixed rates of wages can stand out for higher rates of pay which will generally be conceded because there is plenty of money about, and the investor in Government securities will benefit, because the Government will be deriving more money from customs duties on the increased volume of trade and income-tax on the increased incomes of the trading community. It will, therefore, be in a position to lower the income-tax on fixed securities.

Though it might look as if it was to everybody's interest that this delightful progress should continue indefinitely, there are factors which will come into operation to stop it. The first of these is the increased demand for legal tender money, either bank notes or cash. Though the original impetus has been given by people trusting each other more, there are numerous transactions in respect of which trust is not given, and cash has to be paid—servants' wages, railway and taxi fares, purchases in shops and the numerous demands on peoples' petty cash; and as prices rise, obviously more cash will be required.

There will, therefore, be a demand on the Government of the country to create more legal tender money, both token coin such as shillings and pence, and bank notes.

It may be asked, and it has been asked on many occasions, why a Government should not meet such demands? Why should it refuse to expand the currency and thus put a stop to this highly desirable process which would seem to benefit them as well as the public? The usual answer is that if they do so, they will weaken their gold reserves. As all this increase is due to the growth of credit and not to any increase in the actual legal backing, that is to say gold, it follows that if a Government is to increase its currency notes to meet the demand of the country, that increase must decrease the proportion of gold in its reserves. Also if, as a result of this trade boom, prices have risen in that particular country higher than elsewhere, then foreigners will cease to buy the products of that country which are standing at a higher price than similar articles manufactured by themselves. On the other hand, they will be eager to take advantage of the higher prices prevailing in that country to unload their own produce in it. The balance of trade will therefore be against the country. As it will not be able to export its own highly priced goods, it will have to export gold to maintain its exchange and thus weaken its reserves even further.

This was the orthodox argument of the political economist before the war, but it has been hotly disputed in many quarters since. It is argued that a distinction must be drawn between inflation due tc Government extravagance and a rise in prices due to an increase in trade. It is generally admitted that it is wrong for a Government not to balance its budget but to meet the deficit by churning out notes from the printing press. That can only end in a collapse, and that currency will share the fate of the rouble and the mark. But, they say, it is quite different if the currency is demanded by trade, and if traders are prepared to borrow the extra currency from Government against the security of their goods.

The exponents of that theory, and they are many, say that in the latter case, the increase in trade activity will have started in one country not because of some phenomenon peculiar to that country alone, but because of some world-wide development. In other words, a rise or fall in prices in a particular country will not be a purely national

phenomenon but an international one. If, then, the stage is set for a rise in prices all over the world, all that is required, they argue, is a reasonably liberal policy of co-operation between the authorities responsible for money in the various countries to prevent prices in any one country materially outrunning another and so creating a dangerous flow in the precious metals.

There is, however, one definite and final answer to all these arguments. Reasoning on these lines is based on the same fallacy as many schemes for disarmament. They would work quite well if every nation was prepared to play the game, but they suffer from the fatal defect that any nation which does not play the game will find itself in an overwhelmingly strong position should co-operation collapse. In the event of war breaking out with its inevitably disastrous results on international trade and credit, those countries which have piled up an enormous edifice of credit on slender gold reserves will find themselves in a hopeless position as compared with those which have retained a larger reserve in gold. No individual country can carry on modern war for any length of time on its own resources. It must borrow abroad, and the foreign creditor, before lending, will want to know that its gold reserves are reasonably adequate. We could effect marvellous reforms if there was no more war, if there was one world State. An international currency policy would be one of them, but so long as politics are run on national lines, currency policy must be governed by practical national considerations, and among these considerations, the possibility of war must always be at the back of the mind of every prudent statesman. There must be practical moderation in all things. A nation which arms itself to the teeth is a nuisance to its neighbours, by compelling them to increase their expenditure on armaments. So a nation which, for a similar motive, grabs all the gold it can, lowers the economic standard not only of itself, but of all its neighbours. But it is equally foolish to fly to the other extreme by either disarming completely or by following a credit policy which puts us financially at the mercy of other countries.

All this boils down to the axiom, that, though in theory credit might go on expanding indefinitely on a given basis of gold, in practic there are limits, and that over a long series of years prices must depend on the actual quantity of gold in use as money or reserve for money and not on the credit edifice which it may be possible from time to

time to construct on a given quantity of gold when men are feeling particularly benevolent or optimistic. I hope that I have made this point clear because it constitutes the whole basis of what is known as the quantity theory of money. I shall put it in another way. Though mutual co-operation between bankers and what may be called "sunshine" talk to encourage people to lend money to each other and to buy freely may temporarily increase the amount of credit on any given amount of gold and may consequently keep prices steady, or even make them rise for the time being, the equilibrium so created is essentially unstable. Sooner or later something will turn up to prick the bubble, and down prices will crash to a level which bears a truer relationship to the gold which forms the foundation of the whole fabric.

The broad view of the history of prices in the world bears this out. They have always moved in relation to the quantity of gold and silver available. For instance, we know that the discovery of the New World by Columbus and of the untold riches of Mexico and Peru liberated vast quantities of gold and silver. These spread through Europe and, as a result, prices practically doubled between 1500 and 1600 A. D. After the Napoleonic wars our information becomes much more complete and we can trace the relationship more closely. The world's gold output* was, roughly, worth about five million pounds sterling a year. This was inadequate for the rapid growth of population and industrial development which followed exploration, colonisation and the development of railway and steamship traffic. The result was a serious fall in prices between 1839 and 1851; the general average taking 1850 prices as the basis at 100 falling from 133 to 97, a drop of more than a third. This led to labour agitation and revolutionary troubles in practically every country in the world—1848 being a year famous for its revolutions in France, Germany, Austria and Italy, while we had our own Chartist troubles. In the immediately following years, however, the large gold areas in the west of America and in Australia were opened up with the result that the world's gold output rose rapidly from five million pounds a year to twenty millions. This eased the situation, and prices rose to 132 by 1855. The world's gold production, which was now varying between 20 and 30 million pounds a year, was sufficient to maintain this level of prices until the Franco-Prussian War.

*See chart at page 488.

In 1873, after the conclusion of that war, which was marked by the payment of a large indemnity by France to Germany, a new and very interesting development occurred. Up to that time, with the exception of England, practically every country was either on a wholly silver basis or on a basis of bimetallism, that is to say, it had a silver currency as well as gold, and maintained the price of silver in a fixed relation to gold. The ratio was roughly one to fifteen, that is to say, the silver rupee was worth one-tenth of a sovereign, or two shillings. Germany had long been envious of the position acquired by England, and the indemnity which Germany extracted from France put it in a position, as it thought, to adopt what it considered one of the main causes of England's mercantitle supremacy, namely, a standard based on gold alone. It therefore melted down its silver marks and dumped the silver bullion on the market, along with the silver extracted from France, and used the proceeds to buy gold. The action was well timed. The United States of America were just recovering from the Civil War, and there was a large party there which favoured the abolition of the bimetallic standard based on silver circulating with gold and the adoption of a purely gold currency like England. The large quantities of silver thrown on the market caused considerable difficulties to the silver using countries. The rupee exchange, for instance, was driven down from two shillings to one shilling and six pence. France and the Latin countries were compelled to abandon the free purchase of silver, and the United States eventually followed their example. The abolition of silver clearly narrowed the metallic basis or currency by casting an additional burden on gold, which it was not able to stand. Prices, which had risen to 144 in 1873, fell steadily to 79 in 1895, with the usual results of narrowing trade and socialist and labour agitation, particularly in England. The fall again was arrested by fresh discoveries of gold. The Rand mines in South Africa began to produce in the early nineties. The gold output of the world which was worth about 30 million pounds was doubled within a few years, and then rose steadily to its record of 96 millions in 1915, prices rising correspondingly from 79 in 1895 to 110 in 1913.

When the world war broke out, the credit structures based on gold were quite unable to stand the strain, with the result that every country engaged in the war, had to issue paper money which could not

be exchanged for gold. To prevent the foreign exchanges collapsing, large credits were arranged between the various allied countries, and the expenditure, for instance, of England in France to pay the troops and of France in England to buy munitions were set off against each other and the balance lent by the country in which the balance was incurred. Until the United States entered the war, the purchases of the Allies there were similarly financed by loans to the United Kingdom. In this way the exchanges were pegged. If the French Government, for instance, had to spend more money in England than England was spending in France ordinarily, the French Government would have had to purchase large amounts of sterling with the result that the quotation for francs, which was 25 to the pound at the beginning of the war, would have fallen away possibly to a very large extent. The British Government undertook to peg the franc round about 40 or 50 to the pound by giving the French sterling at that rate and lending them the balance which they could not purchase in the open market. This is obviously a fairly simple matter between countries both of which have inconvertible paper currencies, but it might be asked how could a country which still agreed to exchange its notes for gold, like the United States, peg the exchange of a country like France which did not? The explanation is that just before the war the United States had introduced a new banking system called the Federal Reserve System which enabled the Reserve Bank to issue additional notes which were not completely covered by gold as in the pre-war Bank of England system, but of which a proportion only was covered by gold, and the rest by trade bills, that is to say, lent to traders who promised to pay when they sold their produce. In other words, for every dollar of gold they could issue, let us say, two dollar notes, one covered by gold, the other by an I. O. U. As the Allies were tumbling over each other to buy munitions, there was any amount of trade bills, and so notes poured out and prices soared. The important point is that this meant that whereas in previous wars there were countries which were still on a gold standard, in the last war, there really were none, because though United States notes could still be changed to gold, in practice the structure of gold which the States had built up on their gold basis, was so excessive that in normal times no prudent banker as a business proposition would have allowed it. As a result prices soared to 248 in 1919, a higher level than they ever reached in the Napoleonic wars.

After the war came the settling up. The fundamental mistake then made was to assume that because these debts were expressed in dollars and because dollars were in the inflated circumstances of the time exchangeable for gold these were real gold debts. They were nothing of the kind. The amount of commodities which they would have purchased was less than half of what a similar amount of gold would have purchased in markets which were operating under ordinary economic law. The farce was carried a stage further when the whole debt balance was dumped on Germany. On top of this was the disquieting fact that the gold supplies of the Rand had been dwindling since 1915, and that there did not seem to be any parts of the world left unexplored where new gold deposits on a sufficient scale could be discovered. The world's output of gold which was worth 96 million pounds in 1915 had fallen to 65 by 1922. It was obvious that if the world meant to go back to the old proportion of gold to notes, the most appalling fall in prices was inevitable.

The Bank of England made a desperate attempt to keep things going by international co-operation and by lending money to other countries. It hoped that the central banking institutions of the more important countries in the world would also voluntarily restrict their gold holdings and maintain the credit edifice on them in such a way as to keep prices up. Theoretically in an ideal world it might have been possible, but in practice, the whole project collapsed because of the reason which I have already mentioned, and the pound was forced off gold in the forlorn hope. Why? Because there was one country which put what it considered the necessities of her own national security before the common prosperity of the world. This is not blaming France. Remembering how often and how terribly she had been invaded in the past, no one can blame her if she felt that the international pledges for her security were insufficient, and determined to follow her own way with ruthless realism. She thought that by piling up gold she could compel the nations of the world to recognise her political claims. But she did not get the gold for nothing. She had to pay for it. A certain amount of it was derived from reparations receipts, but the bulk of it was the outcome of her own hard work and her thrift. By lowering the exchange of the franc from 25 to the pound to 123, she destroyed four-fifths of the value of every investment in the country, but she made France a cheap country for the foreigner to buy things from, and a cheap country for the tourist

to travel in. By these means she acquired large amounts of the money of other countries, which she could compel them, when the time came, to turn into gold. Between 1925 and 1929 she more than doubled her gold reserve, raising it from 164 million pounds to 336, while America's holding remained more or less stable at 800 millions and England's at 145.

The bubble was pricked in 1929. The banking authorities in America, in taking steps to stop a stock exchange boom, started a crisis of unprecedented magnitude of which we cannot yet see the end. Within these three years the gold held by France has risen to 640 millions, a rise of 300 since 1929, while the gold in the States has fallen by 260 to 540, England's holding is 130, a drop of 15. The prices of all important commodities have meanwhile fallen to roughly 76, thirty per cent. below the prices of 1914, lower even than they ever were in the last century, and they are still falling. It is a preposterous situation. What is to be done about it ?

In the first place, as a practical proposition, war debts and reparations must be cleared out of the way. That is the British case, and there can be no doubt that without the removal of those enormous international liabilities, no progress is possible. It is not a question of ethics ; whether one Ally should pay another for services rendered in a common war. On that question there are obviously two sides. This is a simple business proposition. These loans, as I have shown, were floated at a time when, owing to artificial conditions, they purchased just about half and in many cases, a third of what they would now purchase. The debtor countries have not got the gold or the capital to repay them ; and, even if payment was allowed in goods (and goods are held back by high tariffs), their export would be on such a scale as to ruin the industries of a country which took payment in them. The world, instead of recognising the impossible, kept fiddling round with impossible promises to pay thousands of millions, terrifying the wits out of every business man and every investor. It is just as if you were to punish criminals by inoculating them with small-pox germs. It might be unpleasant for them, but it would be equally unpleasant for the ordinary peaceful citizen, who would almost certainly be infected too. America in the last three years must have lost far more than the whole value of its foreign debt though that is about three thousand three hundred million pounds at the present rate of exchange. The value of some 15 to 20 representative premier

American railway securities has fallen since 1929 from 3,500 million dollars to 280 million—a clean loss of nearly £900 million—four-fifths of the whole of our debt to her. When one remembers that the falls in their Motor Car Shares, Bank Shares and Land Values have been on a similar scale, there can be no doubt that it would have paid America over and over again to wipe out the entire debt years ago if by so doing it could have retained the level of prices of a few years back. It may be argued that it is not fair to let Germany off everything because she is the ultimate debtor, and then if she is let off, the taxpayers of the various countries will still have to pay to make up the interest which she has surrendered. That is true and it is obvious that Germany must pay something. What is even more obvious is that if the negotiations are unduly prolonged, the world and the taxpayers of the creditor countries are losing more than they could possibly hope to get in the final settlement.

Even when this problem is removed, however, the main problem will remain unsolved, though it will not be so serious. As I have shown, the world's production of gold has been falling steadily since 1915, while the world's population as a whole, has been increasing. In 1915, it touched 96 million pounds, it is now about 80. It also seems unlikely that any new gold mines will be discovered on a sufficiently extensive scale to make up the deficiency. Experts have calculated that, even if there had been no war, prices would have fallen about 10 per cent. below the pre-war level by last year, and that they may fall in future at the rate of about 1 per cent. a year. This, of course, is nothing like the fall which has actually occurred, but though the world could stand such a reduction, it would not be a healthy position. With prices continually falling, trade would be continually depressed and enterprise stifled. It therefore appears that, unless more gold is discovered, the world will have to revise its attitude to it. Possibly the solution may be to take in some other metal, such as silver or platinum, into the currency reserves as a supplement to gold. It is more likely that world currency systems will develop on the lines inaugurated by the Bank of England when it went off the gold standard last September, that is to say, that the authority responsible for issuing legal tender will issue it in such a way as to maintain a reasonable stability of prices in the country itself without too much regard to the actual price of gold in the terms of its own money.

This means in practice that foreign exchanges, instead of staying put, will constantly be moving up and down as the dollar and franc do now. A reasonable quantity of gold will be held in the reserves because gold will still remain the most expeditious method of settling foreign payments, even though foreign countries also may have unfixed the price of gold so that it will have to be accepted as a result of individual bargain. This, as you will see, is a totally different matter from reducing the proportion of gold to notes in your reserve, while still offering freely to change gold for notes at a fixed price. International co-operation on these lines has often been suggested as the way out; it would certainly enable Governments to print more notes, but as I hope that I have already shown you, it is essentially unsound because it plays into the hands of any country which does not play the game according to the rules. What the Bank of England has done is much more drastic and courageous; it is making the value of its notes in the world at large depend not on their gold backing but on the credit of England, the world's belief in its honesty—that it will not turn on the printing press to meet its requirements, but will balance its budget by economy and taxation however severe. There are obviously grave defects in such a development, which must be described as retrograde, and only to be justified by the direct necessity. It is clearly to the advantage of traders and investors that they should have certainty as to the price which one currency will command in terms of another. This, however, is not an insuperable difficulty, and the ruin of the financial fabric of a country is too high a price to pay for it. There is the far greater danger of a Government or a Currency Authority being inefficient or corrupt and using the printing press to meet its budget deficits. To such a course there can be only one end; that of the rouble and the mark. All the same, retrograde though the step may be, it appears inevitable; we have gone too far forward in the internationalisation of finance as compared with the internationalisation of politics. Financial disarmament has outrun political and we must retrace our steps. The British Empire, however, in the long run would seem to have little to fear from such a development. There is no institution in the world so highly trusted as the Bank of England for its impartiality and incorruptibility. If other countries are not prepared to co-operate by lowering their gold reserves, they may find in time that they are left sitting on useless heaps of gold which nobody will buy at the fancy monopoly

value they have put on it, and that the place of gold has been taken as an international currency medium by the pound sterling.

What will be the effect of all this on prices ? As I have already shown, the greatest immediate cause of all the trouble from which the world is suffering is the catastrophic fall in prices in the last two or three years which, coming on the top of the big fall immediately after the war, has made it almost impossible for business men and Governments to carry on.

Is there any hope of any immediate rise ? Here it is impossible to predict. There are currency enthusiasts who, intoxicated with the discovery that it is the lack of gold which is the cause of all trouble and the consequent fact that if we can make our paper money worth less in gold we can put up internal prices, imagine that all they have to do is to turn on the printing press and issue fresh notes until things come right. The problem, as I hope I have made clear to you, is by no means so simple as that. Even those theorists who consider that paper money should be increased, are generally cautious enough to hold that it should only be increased when there is an actual demand from the business and trading community for such money ; in other words that merchants are prepared to pledge their stock as security against the loan of the newly created money from Government. This panacea has been tried time and time again by making the borrowing rates of the central currency authorities as cheap as possible. The bank rates in London and New York are lower than they have been for nearly 40 years, so that any trader who wishes to launch out can get his accommodation fairly cheaply. The difficulty is that they are afraid to do so because they see no hope of selling their produce. Other currency enthusiasts go further. They point out that if a new gold mine is discovered, the adventurers who join in the gold rush, obtain gold with its actual purchasing power which they can dispose of as they like without having to borrow anything from anybody. The new theory has been stated in its crudest form in the United States where, recently, a large number of ex-soldiers marched on Washington to claim a bonus for their war services. The idea was that these men should be paid in paper notes printed up for the purpose. This would give them purchasing power, they would use the money to buy commodities and have a good time generally in exactly the same way as Bret Harte's gold rush heroes, and the large scale demand for commodities thus created would stimulate trade generally.

It sounds very plausible, but there is a definite distinction between the two. In the case of discoverers of a gold mine, the common sense of the world based on thousands of years of experience has realised that the amount of purchasing power so created will be limited. Nobody outside the Arabian Nights or a bucket shop has ever discovered a solid mountain of gold nor is anybody likely to. That is a risk which the world is quite prepared to meet when it comes. The difficulty about printing paper is that there is no limit, and, what is more important, the ordinary business man and investor would realise clearly that there was no limit. If a Government begin by giving a bonus to their ex-soldiers, there is no reason why they should not go on to give a much larger bonus to themselves. Why balance the budget by such unpopular methods as ten per cent. cuts and screwing up the income-tax? Why not print paper to make up the deficit? Why tax at all? If a Government tried that game, it is perfectly obvious that every man with any common sense would do what they did in Germany when marks were being churned out of the Government Printing Press. They would rush to buy goods, furniture, property, anything, so long as the money had any sort of value, in the certain knowledge that however little it might be worth to-day, it would be worth a good deal less to-morrow.

It might be answered that this may be all very well about the rouble and mark, but that a common sense government would, in practice, limit the creation of such purchasing power. That, however, is not the point. Once the purchasing power has been so created and prices begin to go up, producers see that they can turn out their goods at a profit and are eager to borrow freshly created notes against the security of their stocks because they realise that the more they can expand their business the more profits they will make. The Government will, therefore, be confronted with the difficulty of refusing to lend money against perfectly legitimate demands. It has started the snowball rolling and cannot stop it. If it simply flatly refuses to issue any more money, it will precipitate a crash. The Banks will have to close their doors.

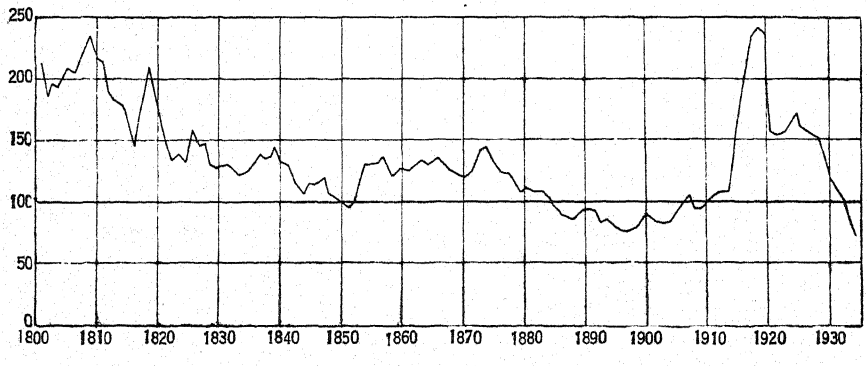
It is possible that later on the world may evolve methods of making prices rise by monetary action, but I doubt whether it knows enough to try it now. The first step which the Bank of England has taken into the untrodden land of monetary theory is quite sufficient to go along with; that is to say to try to keep internal

prices more and more stable. If the Bank of England continues to do this, other countries will realise that it is suicidal for them to cling to their present currency systems if they mean a continuous fall in prices. They will then work round to something like the same system though of course conducted on national independent lines. When the internal prices of the more important countries of the world have been roughly stabilised in this way, it is obvious that the exchange fluctuations between one and the other will also dwindle, and if, at the same time, they have common sense enough to keep their tariffs down and do their utmost to foster internal trade, abandon the childish delusion that they can sell things to people without buying from them, traders will gradually pluck up courage with expanding markets, and prices will begin to move up. In any case, like all crises, this fall in prices, even on the most rigid monetary theory, has overreached itself, so that, even on the old orthodox gold theory, we are due sooner or later for a rise in prices of some 15 per cent. on their present level.

When that upward movement occurs—as occur it certainly will—the various currency authorities of the world will be confronted with a very difficult problem. It will be disastrous to stifle the movement at birth; on the other hand, they must be careful to prevent it degenerating into wild speculation, or prices may bound up too far with a corresponding set-back later. It is impossible to say when this rise will occur. It may be soon, it may be delayed. It may be rapid, it may be gradual, but come it will. In the meantime, we have to eschew fancy theories, keep our heads and wait, sticking it as best we can. We, India equally with England, depend for our livelihood on international trade. We cannot be prosperous while the rest of the world is not. We cannot expect any real revival of our prosperity until international trade also revives and prospers. At the same time, however dark the immediate outlook may appear, we, in the British Empire at any rate, have the consolation that we have now discovered the source of the trouble, so that things for us cannot become appreciably worse, and that later when the rest of the world sees sense, there must be a very general and large improvement.

DIAGRAM OF WHOLESALE WORLD GOLD PRICES FROM 1800 to 1932 (See page 478).

(BASIS 100 FOR 1850 AND 1910).



SHOOTING IN THE CENTRAL PROVINCES.

By A Forest Officer.

In the Journal for July I tried to give some hints on the preliminary arrangements for a shoot in the Central Provinces. Proceeding still on the assumption that the reader really has no experience to fall back upon, it is possible I may be able to save him from some of the mistakes which it is so easy to make.

People do such queer things. Darya, Gond, *shikari* of Dudalpani (there must have been chalk in that water) came to me obviously fed up. I had told him to help the Colonel Sahib and now asked how things were going. The tenor of his reply was, "Rotten, the Sahib never walks a yard if he can help it and never carries his own rifle; once he had a shot at a bear and insisted on resting his rifle on my shoulder. Does he think I am a tripod and want my ear drum burst? Worst of all, I and my son have to sleep by his bed at night." "I expect" I said, "he wants to visit the kills before it is light." "Visit the kills! The last thing he wants is to see a tiger while he is on the ground; no, he puts a black box under his bed and keeps us there to guard his money. Does he think Gonds are dacoits, and that I am a chowkidar?"

That Colonel wrote and told me he had a very disappointing shoot and thought the junglies a poor lot. He would not have understood if I had told him that aboriginals don't steal from sahibs and only want to be treated as man to man.

Then as regards weapons, more than one man has found on arrival that he could'nt close the breech; cartridges right bore, but wrong shape. *Ruat coelum*! Try that rifle and those cartridges before you start. Buy your cartridges in sealed tins; if they have been in stock through a monsoon in cardboard packets, beware. One man, hard up too, arrived with 250 H. V. cartridges, just 200 too many, and a rupee a piece; another, from England, had 2,000 shot gun cartridges, he took back 1,800; another, this time from America, had six rifles for himself and two for his wife, and in the only emergency he ignored his D. B. ·450 and used a small bore Mauser on the tiger; yet another, worst of all, in a jungle fowl beat, gave a boar a charge of No. 6 in the backside. "Just to tickle him up," he said. I could have done the same to him.

One more instance of queer things men can do. They had had their Christmas camp, all as happy as the day is long, a tiger, no contretemps and many thanks. A month later I was out for an evening stalk in that area with my old friend Budaung, Korku, of Tōtley Doh by Pinkapāthar, (say that again, is there no music in that address ?), and at a certain spot he kicked the earth and laughed to himself. " What's the joke ? " I asked. He told me it was here the *burra* sahib had buried the cheetal head. I said the sahib had shown no cheetal shot when he returned his permit, nor had the Forest Guard. " No " he said " it was only a *baccha* in velvet and the sahib told me to cut off the head and bury it there. " How much did he give you !" " He gave me Rs. 5, but I heard afterwards he gave the Forest Guard Rs. 10 and the Forester Rs. 20."

What a pity to disturb the harmony of our correspondence ! But you cannot take less than Rs. 50 from a man who tampers with subordinates. Confession, and explanation of the circumstances, might have cost him nothing ; the wider your experience, the better you appreciate how easily mistakes occur.

But who am I to talk of the queer things others do. Was it is not on the sandy shore of the Wainganga that the panther and I gazed into one another's eyes, and was there not, for one fleeting second, a thought, why should you die, you graceful creature ? Begone the thought, now for the *coup de grâce*. But, alas, to appropriate a happy verse from " *The Field*,"

" Until age leaves me withered and one eyed
At the ultimate end of my road
I shall hear the click, click of the gun I'd
Forgotten to load."

The panther skipped up the bank—and down below, the river rustled to and fro over the shingle, and a peacock screeched to mock me.

A few remarks about kills and machans may be useful.

Kills are generally young buffaloes, though goats serve the purpose for a panther. Tact is required to obtain them. It is not the thing to sell your stock for sacrifice in cold blood. If possible, leave the transaction to a local official. In any case if negotiations appear inexplicably protracted, try to keep your temper ; the best solvents for problems in the jungle are patience and a sense of humour.

If it is a panther you are after, the *boda* should be small. If you are going to sit up and you don't want the kill taken away the rope should be strong. If it is likely to be difficult to see the animal's track, clear a small area round the kill so that you can see whether a tiger, panther, hyæna or wild dog has done the deed. A tiger feeds clean, a panther often makes a filthy mess of his dinner.

Screen a *machan* for sitting up as much as possible. In a beat an animal is hustled and his thoughts are occupied with the enemy on the ground, but coming on to a kill is a different matter. Generally an animal circles round for some time and approaches this unnatural meal with extreme caution. He will spot any movement; when you are stalking yourself notice how it is movement which attracts your eyes, a trembling blade of grass, a leaf falling fifty yards away. So it is with the cats, only more so, as it is on their eye-sight they depend for their daily bread. If you shoot from your right shoulder, and if you have a companion in your *machan*, always have him on your left; sit on a rug, eat soft food, not biscuits, and don't smoke. I don't feel competent to go into the subject of torch devices, but this is worth mentioning. A friend of mine was mauled, sitting on the ground, because the first barrel of his ·450 H. V., in addition to hitting the tiger, broke the bulb of his torch; biter bit with a vengeance, his position indubitably marked by the flash of the torch, himself blinded and a wounded tiger with all the cards to play.

When you have a beat take the trouble to inspect the army, dismiss the halt and the maimed and children too small to look after themselves. Satisfy yourself that every individual there knows the meaning of the whistle which you blow. The second they hear that, it is every man for himself, up trees and stay there. Otherwise, it doesn't matter how many shots are fired, how fierce the *gul mul*, the line is to come steadily on; if there is any danger to any man you will blow the whistle. Always have a shot gun in your *machan*,—you may want to search spots hidden from view, if you are not quite certain how the land lies, before you take up your task of finishing off a wounded animal.

And now for three short tales, all true and each with the moral sticking out a mile.

April is the month of "manna," by which I mean that then all creatures, human, wild and domestic, wait for the fleshy flowers of

the *mohwa* tree to drop to earth and provide both bread and wine. The early bird catches the worm. Twice have I known the keen *shikari*, thirsting for the blood of a bear, sally forth alone before the dawn to do the round of *mohwa* trees. See, there in the morning mist she crouches, shuffling from side to side on her hunkers as she gathers in the flowers. Bang! up she rears, with that almost human scream of the wounded bear,—bang again—she's down!

One fellow has never pressed a trigger since, that's thirty years ago. Old women must rise early when all the world wants *mohwa*.

A young man's first beat, early in the year, the undergrowth still green and very thick along the river bank. Movement behind that clump of *lantana*, a speck or two of fawn, surely a cheetal's back, anyhow I'm going to let fly. By Jove, it's down! Up comes the beat hook behind that bush, I've shot a deer. Cries and angry shouts,—his own *shikari* in a khaki coat, dead for his folly in acting as a stop on the ground away on the wing.

A tiger beat. Away there on the left, he slinks like a wraith through the rocks, halts a second and listens to get the direction of the beat. *Crack!* He speaks to the shot. *Crack*, again! He's out of sight. A shout to Bill, "He's hit, finish him off;" again, "For God's sake, fire." Why won't he answer? Curse this din the beaters make. Oh, hell, ought I to blow the whistle. "Bill, is he dead?"

The beat is over there lies the tiger, dead, and there in his *machan* sits Bill all huddled up—a *ricochet*.

THE BATTLES OF THE MASURIAN LAKES.

By Lieutenant-General N. Golovine, late Russian General Staff.

Lieutenant-General Golovine is the author of numerous works on tactics and military history which have gained for him a European reputation. His "Problem of the Pacific" is probably his work best known to English readers.

During the Great War, General Golovine held several high appointments on the General Staff of the Russian Army, which gave him exceptional opportunities for actual experience and for observation. Later, in 1918, *while recuperating at Odessa, he succeeded in collecting and documenting a vast quantity of the army archives that had been jettisoned during the debacle. The valuable material thus obtained, added to his own knowledge and supplemented by information received from colleagues of the Russian General Staff, placed General Golovine in a position to write a really authoritative history. The result is his "The Campaign of* 1914 *on the Russian Front," which is recognised as one of the really important contributions to the history of the War.*

This work has not as yet appeared in English, though the late Marshal Foch wrote an enthusiastic preface for a French edition. The Journal is thus fortunate in being able to give much information from Russian sources which has not hitherto been available to English readers.

The length of the original volume prevents its being reproduced in full in the Journal and what follows is a series of necessarily incomplete excerpts from an authorized translation of the Russian edition.

General Golovine's book deals first with conditions in Russia preceding 1914 *and with the original Russian War Plan. He then describes mobilization, followed by the advance of the Russian First Army under General Rennenkampf into East Prussia—a successful but precipitant offensive which culminated in the victory of Gumbinnen. The extracts which follow are taken from succeeding chapters, and give an account of the Battles of the Lakes and of the ill-fated offensive of General Samsonov's Second Army.*

Operations of the Second Army.

Unpreparedness of the Second Army for a Rapid Offensive.

We have seen how seriously "precipitancy" in the invasion of Eastern Prussia had affected the operations of the First Army, but this "precipitancy" had yet more harmful results in the Second Army. Even the very persons responsible for the Plan of War had begun to recognise the difficulty of fulfilling the obligations therein undertaken for the first days of the war. In his memoirs Paléologue, the French Ambassador, states that it had reached the ears of Sazonov, our Minister for Foreign Affairs, that General Yanushkevich, Chief of Staff to the Supreme Commander-in-Chief, and General Jilinsky, Commander-in-Chief of the North-Western Army Group, were of opinion that a hasty offensive into Eastern Prussia must inevitably break down "as our troops were still too much dispersed and the transport problem involved many difficulties." "But," added our Minister for Foreign Affairs in this conversation, "as we have no right to leave our Ally in peril, despite the undeniable risk in the operation which has been undertaken, it is our duty to attack immediately, even as the Grand Duke has ordered . . . ." This was the answer to the words of M. Paléologue: "Remember what a critical time this is for France."

The work of the Russian G. H. Q. was carried on under the influence of this ideal—the urgent necessity for coming to the rescue of France at the earliest possible moment. On the 20th.[1] August, the day of the battle of Gumbinnen, a telegram had been received from our Military Attaché in Paris stating that the French War Minister "believed in all seriousness that it was possible for us to invade Germany and march upon Berlin from the direction of Warsaw." Such an idea could only have arisen from a loss of mental equilibrium in this crisis. It was evident from the expression of this desire that even the expedient of accelerating our offensive into Eastern Prussia was considered inadequate. In the memoirs of Paléologue, the French Ambassador in Petrograd, it is noted: "On the Belgian front our operations have taken a bad turn. I have received orders to urge the Imperial Government to hasten as far as possible the commencemen of the offensive of the Russian armies."

Finally, on the 26th. August M. Paléologue received a telegram from Paris, in which it was stated: "We have received information

1. Throughout the dates given are according to the usual European calendar, not the Russian "Old Style" which was thirteen days earlier.

from a most reliable source that two army corps, at first facing the Russian army, are in course of transfer to the French frontier, being relieved on the Eastern frontier of Germany by Landwehr units. The war plans of the German Great General Staff are too clear for it to be necessary to insist on the need for a determined offensive on the part of the Russian armies advancing on Berlin. Convey this urgently to the Russian Government and insist upon this."

Incidentally, owing to the effect of the battle of Gumbinnen, exactly the opposite had actually taken place—*two army corps were being moved from France.* This fact shows the extent to which "nerves" influenced the demands of our Allies upon us. The appeal could not fail to give the Emperor and our Supreme Commander-in-Chief the idea that France was at her last gasp. During these days the rôle of Commander-in-Chief, not of the Russian army alone, but of all the Allied armies, was imposed upon the Grand Duke Nikolai Nikolaievich, and therefore his decisions were dictated not by the interests of Russia alone, but by those of the Allies as a whole. This point of view must always be borne in mind in studying the campaign of 1914.

On the 12th. August, *i.e.*, on the 13th. day of mobilization, in his telegram No. 513 the Commander-in-Chief of the North-Western Army Group informed the Chief of Staff to the Supreme Commander-in-Chief that "although the orders (issued to the Second Army) to assume the offensive refer to their execution *with the utmost speed*, and although the units of the army have been moved to their starting-points for crossing the frontier, this crossing can hardly be expected to be carried out by the cavalry, supported by infantry, earlier than the 16th day (the 15th August), and by the main forces of the army earlier than the 19th.-20th. day (18th. 19th. August)." It should be recalled in this connection that General Yanushkevich's letter (No. 345) had ordered the offensive to commence on the 14th. day (13th. August), *i.e.*, 4 or 5 days earlier.

The haste with which the Second Army was embodied had dire effects upon it. The army consisted of three corps of its "own" military district, the Warsaw, together with one corps (the IInd.) of the Vilno Military District, and one corps (the XIIIth.) of the Moscow Military District. Unquestionably this of itself was an obstacle to the "Speeding-up" of the commencement of the offensive. The result proved to be even more unfortunate than in the First Army.

General Samsonov's army, like that of General Rennenkampf, took the field with its rear not properly organised, but the degree of this disorganisation in General Samsonov's army amounted to absolute confusion. Not only had the army failed to reach its proper establishment in field bakeries and in corps and army transport, but there were divisions, for example, the 2nd. Infantry (belonging to the XXIIIrd. Corps), without even their divisional trains: the Howitzer Group of the same corps had no transport park, and the ammunition was loaded on country carts, the ingenious gunners wrapping the shells in plaited straw. Consequently the XXIIIrd. Corps units were a heavy burden to the neighbouring corps, which for the time being became responsible for their supply, and were thus upset in their own calculations. As might be expected, the supply situation was eased to a certain extent by the circumstance that the corps of Samsonov's army, as was also the case in General Rennenkampf's army, took the field short of their establishment of infantry units: for example, instead of the 32 battalions laid down, the VIth. Corps had a total of 24½; the XVth. Corps had 28, and the XIIIth. 31.

In the descriptions which individuals who had actually been present gave at the inquiry into the reasons for the catastrophe to Samsonov's army, one reads again and again how the commanders of fighting units begged for an "unhurried offensive," and how the divisions of the XIIIth. Corps on the march were not like fighting units at all, but reminded one more of a "Pilgrimage." This latter fact was a direct consequence of the circumstance that the XIIIth. Corps did not maintain an extra strong peace time cadre, as was the case with certain of the frontier corps, and therefore the units of this corps required a certain period for the "digestion" of reservists reporting upon mobilization.

It is stated in General Klyuev's [1] notes that upon his arrival in Byelostok to assume command of the XIIIth. Corps, he was suddenly faced with the picture of the total unreadiness for immediate action of units, 60 per cent. of which consisted of newly reported reservists. As we had no territorial system of bringing units up to strength, these two-thirds of the rank and file were complete strangers to their officers. In this state units were straightway entrained, transported to Byelostok and embarked upon a forced campaign. "The men in the ranks had honest Russian faces, but they were only peasants in disguiss, whom

[1] The Commander of the XIIIth. Army Corps.

it was necessary to train." Having formed this opinion of the corps placed under his orders, General Klyuev visited the Second Army Commander to acquaint him personally with it, and to report that the only way to make these units militarily efficient was to exercise deliberation in the offensive, which would at the same time permit of the proper organisation of the supply system.

The incomplete organisation of the rear had its effect even upon a service so purely concerned with operations as the Signal Service. The XXIIIrd. Corps had not yet received all the technical signal material laid down by schedule. Even in a corps where this material was complete, it was insufficient to establish the communications necessary under the conditions of the manœuvre to be executed.

The following example will serve to show how real was the lack of organisation of the Signal Service of the army. An officer in charge of the Signal Service of the newly formed Ninth Army, visited the central telegraph station at Warsaw on business concerned with the equipment of the Army Signals. To his horror he saw that a whole stack of telegrams addressed to the staff of the Second Army was lying untouched in the central telegraph office of the town. These telegrams had not been sent on owing to the fact that direct telegraph communication had not been established with the Second Army, and that the subsidiary lines were completely blocked. This officer carried off the whole pack of telegrams and at once took them personally by car to the staff of the Second Army.

What must the situation have become when the Second Army entered the territory of Eastern Prussia, where the whole population was in arms, and where telegraph communications were cut upon our invasion, the apparatus being destroyed and the personnel taking to flight! The immediate consequence was that corps, having exhausted all their signal resources to get into communication with their divisions, were unable to extend their lines to Army Headquarters and to their neighbours, and A.H.Q. could not aid them with its own resources. A further result was that even by the 23rd. August line communication had not been established between certain of the corps and the Staff of the Army was forced to have recourse to wireless telegraphy as a means of transmitting messages. But here in the employment of this new device of science the disorganisation resulting from the haste with which the army had taken the field was especially

in evidence. For instance, it was discovered that the XIIIth. Corps was not in possession of the key for deciphering telegrams sent out by stations of the VIth. Corps. For this reason or for some other reason equally due to the disorganisation of the Army Signal Service, Army Headquarters sent important operations orders *en clair*. The despatch of messages in this way must of course also have been due to complete lack of training of the staff itself, but this very unpreparedness still further emphasises the impossibility of an efficient accomplishment of that speeding up of the commencement of operations which was demanded of the Army.

The confusion in the staff work of the Army had its effect upon all the lower staffs. Most of the Corps Commanders complained that Army Headquarters had not acquainted them with the objectives given to corps for their operations. A perusal of the so-called "*directives*" for the Army is sufficient to determine the justice of this accusation. These documents in no way differ from commonplace orders and correspond little with what should be understood by the word "*directive.*" The Staff of the Army likewise kept corps but poorly informed of the situation. The confusion in the staff work of the army seriously affected the troops. "The corps staff used to receive orders only late at night," testifies General Klyuev. "This became such a custom that the staff officer on duty was ordered always to despatch at 1 a.m. the following telegram: 'Orders for to-morrow not received: am waiting.' Sometimes also at the moment a march was commencing orders would be received from the staff of the Army changing the direction of the march. The units had then to be halted, new advance guards sent forward and those already put out withdrawn, the troops generally shifted about and the march order destroyed."

The unpreparedness of our higher staffs was felt more acutely in the Staff of the Second Army than in that of the First. The latter was formed entirely from the staff of the Vilno Military District, but the Staff of the Second Army came from that of the Warsaw Military District, which had also to provide the staff of the North-Western Army Group. This latter, with the Chief of Staff of the Warsaw Military District at its head, had taken all the best officers. The Staff of the Second Army filled up its General Staff personnel from other districts and therefore was essentially a composite of great and little. Owing to the lack of thought given to our mobilisation, the Army

staffs had not assembled in peace time for their members to become acquainted with one another at war games and staff rides, as was the case in Germany and France. Moreover, his very appointment was kept secret from an officer, thus making it impossible for him to prepare himself for his allotted rôle. The chaos which reigned in many of the higher staffs at the commencement of the war was the natural result of this state of affairs.

To complete the tale of the infirmities of the Second Army yet one more must be added—one of which General Rennenkampf's army was also the victim. Army corps found themselves deprived of divisional cavalry, properly so called. In most corps second and third grade Cossack units, untrained at the commencement of the war, had been detailed to fulfil this rôle. Owing to delay in their arrival, measures were taken in the Second Army for the temporary attachment of units in their place. But what happened in actual fact? General Martos, commanding the XVth. Corps, requested that one of the regiments of the cavalry divisions which in peace time were part of the establishment of the XVth. Corps should be left temporarily in that corps in the rôle of corps cavalry, "as had been arranged, in the provisional tables for the employment of units in case of war—the 6th. Glukhovsky Dragoon Regiment being detailed therein for the XVth. Corps." This was changed and he was given the Orenburg Cossack Regiment from the 13th. Cavalry Division. Corps Cavalry should know the corps they are serving, and the corps commander should train them and have confidence in them, but instead he knew that the Orenburg Regiment was only accustomed to police service in Warsaw, and knew nothing of service in the field. But this request of General Martos was "categorically" refused. "As a result," he continues "the corps was left without cavalry reconnaissance on the march and in action. The Cossacks also turned out to be untrained and to be chary of running into danger."

The situation in the XIIIth. Corps was no better. "The cavalry reconnaissance," writes General Klyuev, its commander, "was carried out by four sotnias of the Frontier Guard, attached to the corps. In peace time the Frontier Guard, while executing its arduous duties, received its cavalry training in units no larger than a troop, or, rarely, a sotnia. It was therefore completely untrained for carrying out distant reconnaissance, and it fulfilled its duties in near reconnaissance just as any N. C. O. of the Transport would have done."

The Approach of the Army to the Battle-field.

The situation created in the French theatre by the criminally thoughtless Plan of War had a serious influence upon the strategy of the Russian theatre. There was also the influence of the general politico-strategical situation, which is evidenced in G. H. Q. orders dated 8th. August for the concentration of the Guards' and the Ist. Army Corps in Warsaw. The idea of immediate pressure upon Germany by the shortest line of operations upon Berlin is still more forcibly expressed in the memorandum dated the 26th. August, drawn up by the Operations Branch of G. H. Q. under the direct influence of the impression of General Rennenkampf's victory at Gumbinnen and of the alarming news received from France. According to this memorandum it was proposed to " expedite the occupation of the Lower Vistula," and with this object to develop an offensive from Warsaw along the left bank of the Vistula ; " to expedite the clearance of enemy forces from Eastern Prussia," and for this purpose to transfer General Rennenkampf's army, to the strength of 4 or 5 corps, by rail to the left bank of the Vistula. General Samsonov's army was to remain on the right bank of the Vistula. Of this force one first line corps and 2 or 3 second line divisions would guard Konigsberg, 1 or 2 first line corps, with 2 to 4 second line divisions in strongly fortified positions in the area Preussisch Holland—Saalfeld—Deutsch-Eylau, and two first line corps echeloned in rear at Soldau would guard the front Marienburg-Graudenz. On the left bank of the Vistula the Ninth, First and Tenth Armies, to a strength of, say, 15 corps, would be deployed in order to develop operations into the interior of Germany. In case of the evacuation of the Lower Vistula by the Germans, General Samsonov's army also would be transferred to the left bank of the river, on the right flank ; the Armies would then be deployed in the following order—the Second, Ninth, First and Tenth.

The actual course of operations necessitated the expenditure of corps " under orders for the offensive into the interior of Germany " to reinforce the North-Western Army Group (the Ist. Corps) and the South Western Army Group (the Guards' Corps). Moreover, the hasty strategy of concentrating troops to carry out operations directed against Poznan led to the violation of one of the basic principles of military science—the concentration of force in the decisive place at the decisive time. The present Second Army operations were now to

decide the fate of our first manœuvres against Germany, and the battle impending before the Army was the decisive moment. One is reminded perforce of the words of the great Suvorov: "Go into battle, assemble your troops, drain the lines of communications...."

In consequence of this, the desire of General Jilinsky, the Commander-in-Chief of the North-Western Army Group, to use the corps which had been concentrated in the Warsaw area to aid in the operations of the Second Army, was entirely justifiable. He included the Guards' and the First Army Corps in the establishment of General Samsonov's army.

But on the 9th. August General Yanushkevich, Chief of Staff to the Supreme Commander-in-Chief, warned General Jilinsky by telegram that one of these corps—the Guards' or the Ist.—was to serve as an "active-operations-reserve" (?) in the hands of the Supreme Commander-in-Chief, and, in view of the move by General Jilinsky of the Ist. Corps to Plonsk, "under no circumstances was the Guards' Corps to be moved out of the Warsaw and Novogeorgievsk area."

The epithet "active-operations" could not alter the hard facts of the case: as events turned out during the days that were critical for Samsonov, the Guards' Corps was astray in the area of the left bank of the Vistula.

On the 21st. August General Jilinsky enquired of G. H. Q.: "Can the Ist. Corps take part at Soldau?" The reply was returned, under the signature of General Yanushkevich, that "the chief rôle of the Ist. Corps is to secure the offensive operations of the Second Army on the Thorn flank. If it is certain that there is no danger to the left flank of the Second Army from the direction of Thorn, it is permissible for the Ist. Corps to take part in the fighting on the army front." The evasive tone of this reply limited the co-operation of the Ist. Corps in the Second Army Operations to the Soldau area.

The battle of Gumbinnen had caused General Jilinsky to ponder upon the risks involved in the task which had been imposed on General Rennenkempf's army. By his orders of the 22nd. August he had taken the IInd. Corps off the establishment of the Second Army and had transferred it to Rennenkampf's army. Thus General Samsonov's army was weakened by yet another corps, and the IInd. Corps, which had taken no part in the battle of Gumbinnen, was now left out of the

Second Army battle—yet another corps gone " astray." Finally, the departure of the IInd. Corps from the Grodno area forced General Jilinsky to leave the 3rd. Guards' Infantry Division (of the XXIIIrd. Corps) in this area.

In the final analysis, instead of seven corps (the Guards', the Ist, IInd, VIth, XIIIth, XVth, and XXIIIrd.), with a strength of 15 Infantry divisions, being placed at the one time at General Samsonov's disposal, he was given only 9 infantry divisions (the Ist, VIth, XIIIth. and XVth. Corps and half the XXIIIrd). Moreover, of these 9 divisions, two (the Ist. Corps) by the instructions given above were fettered to a specified area (Mlava-Soldau). It should be remembered here that the fire strength of 9 Russian infantry divisions was less than that of 6 German.

We will now examine in detail the operation task imposed upon General Samsonov's army, weak as it was.

The original proposals of General Jilinsky for the operations of the Second Army are set forth in his telegram to G. H. Q. dated the 10th. August. It was stated therein that General Samsonov's army would attack with two corps (the IInd. and VIth.) on the front Lyck-Johannisburg, and with the two other corps (the XIIIth. and XVth.) on the front Rudschanny-Ortelsburg, and later on the front Rastenburg-Rothflies. Thus the Commander-in-Chief of the North-Western Army Group left General Samsonov's army upon the centre line of operations, the line leading from the Graevo " rail approach " to Eastern Prussia. It was also in accord with the Plan of War that the Second Army should be deployed upon this line. But when the *directive* (letter No. 345) of the same date, the 10th. August, arrived from G. H. Q., the Commander-in-Chief of the North-Western Army Group altered his original proposals.

Letter No. 345 demanded the speedier exertion of pressure upon Germany, with which object it was proposed to extend the objectives of the Commander-in-Chief of the North-Western Army Group, the actual suggestion being that the Second Army should attack " turning the line of the Masurian Lakes from the West with the object of shattering the German Corps which had deployed between the Vistula and the Masurian Lakes, and thereby preventing a German withdrawal behind the Vistula."

The operation about to be carried out by a part of the corps of the Second Army, to turn the Masurian Lakes from the south, was not sufficient to fulfil this task, and General Jilinsky decided to alter the line of operations of the Second Army to one to the west of the Masurian Lakes, leaving one corps (the IInd.) covering the Lyck flank. He reported this decision to G. H. Q. on the 12th. August, and sent General Samsonov *Directive No.* 2, dated 13th. August. According to this directive the main forces of the Second Army were to be deployed upon the frontier between Mishinets and Khorjele, to attack the front Rudschanny-Passenheim, and subsequently to attack northward in flank and rear of the line of the Lakes.[1]

The Army Commander, having received this directive from the Commander-in-Chief of the North-Western Army Group, on the 14th August issued Army Order No. 1 for the deployment of the army before crossing the frontier, and on the 16th. August sent out to Corps Commanders his *Directive No.* 1. It will be seen from these operation orders that General Samsonov had shifted the line of deployment of his Army still further to the left, linking the left flank of the XVth. Corps to the Ist. Corps right flank, which was operating on the Mlava-Soldau line. In his telegram No. 1012, dated the 17th. August, General Jilinsky objected to this change of the front of deployment (of the XVth, XIIIth. and VIth. Corps) still further westwards. In this telegram he said: "On the basis of my proposals, approved by the Grand Duke and set forth in *Directive No.* 2, the front specified for the attack of the Second Army to the west of the Masurian Lakes was from the line Mishinets—Khorjele to Rudschanny—Passenheim. You have extended your left flank to Jaboklik, and consequently the front of the three corps of the Second Army during the march to the frontier will cover 60 versts, which I consider excessive. In view of the fact that the 1st. Corps, being part of the reserve of the Supreme Commander-in-Chief, has been placed at your disposal to support your forces, I consider it better to put the 2nd. Infantry Division into the front line."

General Samsonov's army had in fact been "pulled" westwards. We use the word "pull" with intent. Factors relating to the basing of armies have acquired far greater importance in modern warfare than was the case in earlier periods. A modern army cannot fight a battle unless continuously served by transport of all sorts. The Second Army, which had commenced its offensive before the formation

[1] See Diagram No. 1.

and organization of its lines-of-communication and subsidiary services had been completed, was fatally bound to the Russian railway lines. We emphasise the word " Russian," as owing to the difference in gauge, technical work on a large scale would be required before the German railway lines could have been used. At the commencement of the invasion by the Second Army this work was still more incomplete than in the case of the First Army. The railway line Novogeorgievsk-Mlava naturally acted as a powerful magnet.

Modern strategy does not complete its task in the theatre of war merely by concentrating large forces on the field of battle ; it is confronted by another problem of equal importance—that of organising the lines of communication of the fighting troops. This aspect of command in the field was completely overlooked in planning the first operations on the North-Western Front, just as at the Kiev war game conducted in April 1914 by General Sukhumlinov for members of the higher command. The very first contact with the realities of the situation caused the plan, by which the Second Army was to circumambulate the Masurian Lakes to a distance of more than a hundred versts, to burst and disappear like a pricked bubble.

A careful study of the East Prussian network of railways will show us how " fantastic " in another regard also were the projected operations of the Second Army : the front of the River Alle, continued by the belt of lakes extending between Allenstein, Gilgenburg and Lautenburg, had been so well equipped by the Germans with railway communications, that twelve lines served it from the west, of which three were double. It would be difficult to admit the supposition that the Germans, should they decide to defend Eastern Prussia, would permit General Samsonov's army to march peacefully northwards between the chain of the principal Masurian Lakes and the River Alle. In this case a German flank attack from the front Allenstein—Lautenburg, which was served from the west by seven lines of railway, would unquestionably have ensued, and under these conditions it would follow that the further General Samsonov's army proceeded, the more dangerous its situation would become ; it would literally fall into a strategical trap.

In " A Brief Strategic Outline of the War of 1914—1918," published by " Voennoe Delo," appears the statement that General Samsonov on the 11th. August addressed a memorandum to the Chief of Staff of the North-Western Army Group, in which he insisted on the necessi-

ty for disposing his army further to the West. In order to obtain an explanation of General Samsonov's point of view, which did not coincide with that of the Commander-in-Chief of the North-Western Army Group, we requested General Postovsky, the late Chief of Staff of the Second Army, to enlighten us upon this historically important question. Its great interest induces us to reproduce in full the reply received.[1]

"In 1911 or 1912, I cannot recall which, the Staff of the Warsaw Military District [2] succeeded in obtaining through agents an account of the War game of the German General Staff, the subject of which was a similar offensive.[3] One of the armies on the Russian side was attacking on the line upon which General Samsonov's army subsequently came to attack, and the German forces ordered to operate against it were concentrated in the Western part of Eastern Prussia, in the area of Deutsch Eylau and Osterode. Having turned the left flank and rear of the Russian army, which had penetrated far into Eastern Prussia to the West of the Masurian Lakes, they annihilated it.

"This German plan of operations at the war game answered exactly the peculiar conditions of the East Prussian theatre. In fact, the offensive of an army from the Warsaw district northwards, as it developed, enabled the Germans—equally those concentrated in the Western part of Easten Prussia, and those arriving by rail from the more central districts of Germany—to take the attacker in flank and rear by means of a simple frontal movement.

"Those responsible for working out the plans for the offensive therefore considered it essential to take as axis the railway line Novogeorgievsk-Mlava, but strictly on condition that part of the army be disposed westward of this line, and moreover, that the flank of the offensive be made secure by marching the left flank units of the army in echelon. It was essential to leave the railway line Novogeorgievsk-Mlava covered by the flank of the army, because this was the sole line of supply in a country full of swamps and quicksands, where transport was a matter of great difficulty.

"If the attacking army was not strong enough to occupy the whole front from the Masurian Lakes to Mlava and considerably further westward, it appeared better to remove it from the belt of lakes and lead it westward thereof. Communication between the First

[1] "The Offensive of General Samsonov's Army in Eastern Prussia" by General Postovsky; manuscript in the possession of the author.

[2] General Postovsky was at this time Quartermaster-General on the Staff of the Warsaw Military District.

[3] An invasion by a Russian army, similar to the offensive of General Samsonov's army. (Author's note).

and Second Armies was in any case impracticable of attainment. Therefore it was better not to attempt it, and to operate against the area Deutsch Eylau—Osterode."

These considerations were conveyed to General Samsonov after his arrival in Warsaw on the third day of mobilisation, and were approved by him. Unfortunately, when the decision was taken to embark on an immediate offensive of the army into Eastern Prussia, General Samsonov was not given any sort of choice as to the means by which the task imposed upon his army was to be carried out. The offensive was regulated by the *directives* of the Commander-in-Chief of the Army Group, and these laid down with exactitude the trace of the Army front and even the lines of advance. Therefore, to keep within the limits of the *directives* which he had received, it only remained to General Samsonov to try to extend his front westward as far as possible, and to have strong echelons in rear of his left flank. The first of these echelons was the Ist. Corps, and the second, the Guards which up to the commencement of operations had been included in the establishment of the Army. The Commander of the Second Army attached special importance to the tasks allotted to this corps. To General Samsonov's extreme chagrin, at the time ordered for the commencement of the march of this corps, the corps commander received from the staff of the Front direct orders for the removal of the corps from the establishment of the Second Army. He did not immediately report the orders he had received, so that only after the lapse of twenty-four hours, when the offensive had already been developed, did General Samsonov learn of the removal from the Second Army of the more important of the corps in echelon. Subsequently the Commander-in-Chief of the Front also limited the rights of the Second Army to issue orders affecting the Ist. Corps.

On the 19th. August the Commander-in-Chief of the North-Western Army Group despatched the following telegram to General Samsonov: "The delay in the Second Army offensive is placing the First Army, which has already been fighting for two days at Stalluponen, in a difficult position. Therefore expedite the offensive of the Second Army and develop operations as energetically as possible, bringing the Ist. Corps into action if necessary for this purpose."

Such efforts were indeed necessary, owing to the strategic situation created by the hurried advance into Prussia of General Rennenkampf's weakened army, but they were beyond the demands that

could practicably be made upon the troops of the Second Army. The strategic conception of the operations planned for this front was based upon an overestimate of the capacity even of the best troops in the world. General Samsonov could only reply: "The army has been advancing without a pause since the receipt of your orders, traversing daily more than 20 versts of sands, and consequently further acceleration is impossible."

An eye-witness thus describes the march of the Second Army: "The surface of most of the roads was soft and sandy, which made transport movement extremely difficult. I myself saw a convoy being moved forward thus: from one half of the vehicles the horses would be removed and harnessed to the remainder, which would then be moved forward a verst; then all the horses would be taken back to the vehicles left behind, and so on throughout the entire march. The troops never saw their supply trains. A day's halt was never given. In this way the XIIIth. Corps, having completed nine marches without its transport and without bread, became especially disorganised. The reservists unused to marching were worn out."

Thus exerting themselves to the limit of their strength, the corps of the Second Army on the 21st. August had reached the line Friedrichsfelde-Mlava. In advance of the right flank of the army marched the 4th. Cavalry Division, in advance of the centre, the 15th,[1] and in advance of the left flank, the 6th; the 5th. Cavalry Division remained on the left bank of the Vistula.

Information obtained from reconnaissance gave it to be supposed that Divisions of the German XXth. Army Corps, reinforced by Landwehr units from the garrison of the Vistula forts, were opposite the Second Army. This was the case. The following were the German forces opposite the Second Army:—

	Battalions.	Batteries.	Squadrons.
The XXth. Army Corps consisting of the 37th. and 41st. Infantry Divisions. ..	25	29	6
The 70th. Landwehr Brigade.	6	2	4
General Unger's Division (the 20th. Landwehr Brigade and General Zemmern's Brigade).	12	6	4
Total ..	43	37	14

[1]. When the fronts neared one another the 25th. Cavalry Division was transferred to the left flank.

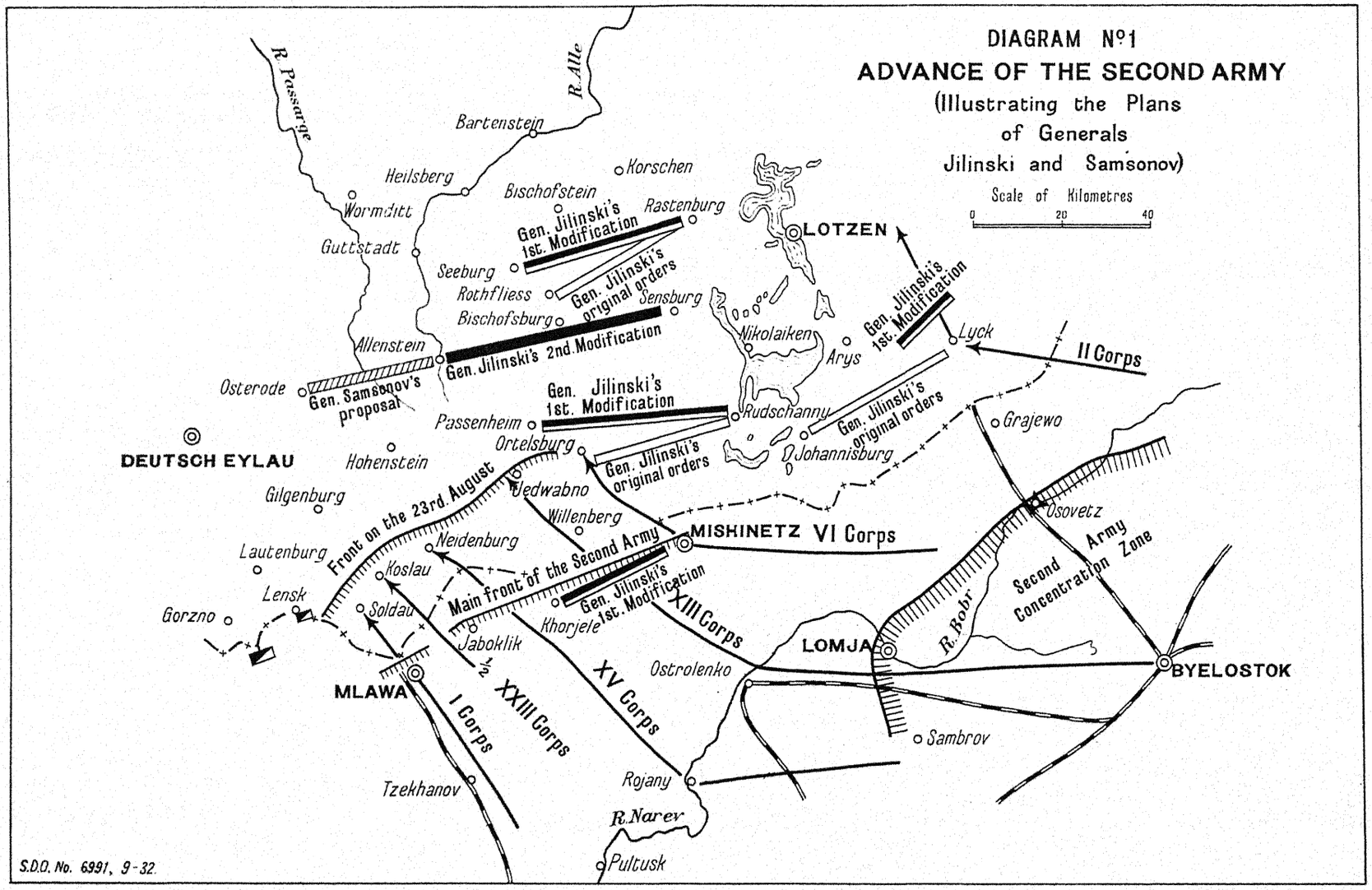
During the 20th. August reports were received that the enemy was hastily retreating before our troops, and an air scout stated that he had seen two long columns leaving Mlava for the north. But at the same time cavalry patrols reported that they had come across numerous barbed-wire entanglements, sited in good defensive positions, in sectors of the frontier belt at Ortelsburg, Neidenburg, and to the west of the latter. The outskirts of villages and the ditches draining the swamps were everywhere heavily wired. Upon the declaration of mobilization trenches had been dug behind this wire, and the outskirts of most villages had been turned into strong points.

This caused General Samsonov to decide on a cautious approach to those areas which would probably be fortified, and on the endeavour to capture them by the use of enveloping and flanking tactics. His *Directive No.* 3 issued by him on the 21st. August and containing operations orders for the 22nd. August, was based on this idea. This directive provided for the staging by the VIth. Corps of an operation to obtain possession of the Ortelsburg area, and of one by the Ist. and XVth. Corps, to obtain possession of the line Neidenburg-Soldau; the XIIIth. Corps was to remain in the Kutzburg-Kannwiesen area and to be ready to turn the Ortelsburg or Neidenburg position; the 2nd. Division was to march on Mlava.

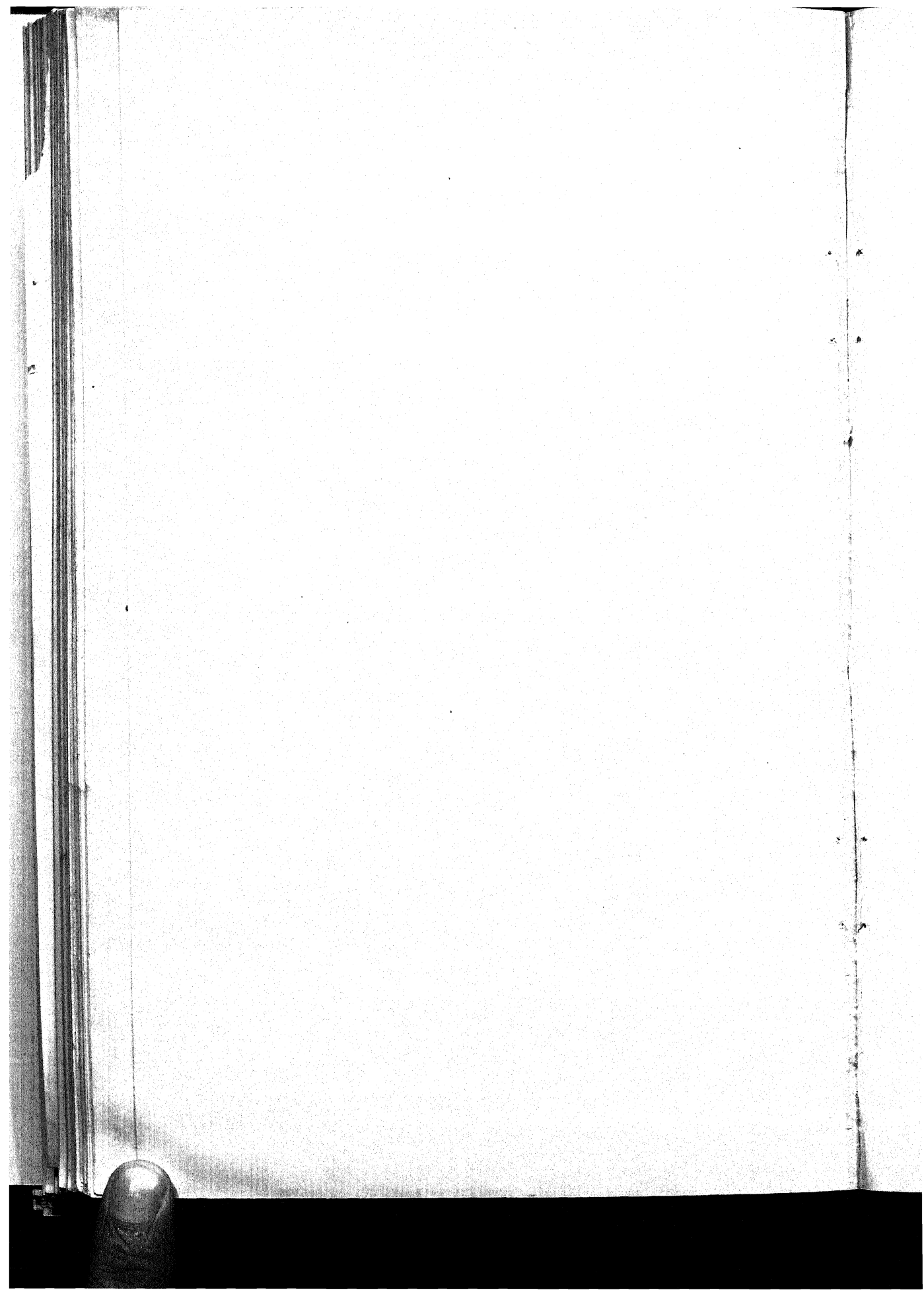
General Samsonov's superiority in strength was not sufficient to enable him, in planning his operations, to calculate on taking the German positions at one blow, even taking into account the exaggerated intelligence concerning the "German defeat at Gumbinnen," which had been communicated to Samsonov by the Staff of the North-Western Army Group.

General Jilinsky remained extremely dissatisfied with General Samsonov's *Directive No.* 3. On the 22nd. August he telegraphed (in his No. 1145) as follows: "..... I consider the dispositions for the 22nd. show a great lack of resolution and I demand immediate and resolute operations." In his telegram No. 6295 in reply General Samsonov pointed out the extreme exhaustion of the troops, the impossibility of bringing up the 2nd. Division, which had been left behind, the disorganisation of the lines of communication, and the fact that units, especially in the XXIIIrd. Corps, were not at full establishment.

DIAGRAM Nº1
ADVANCE OF THE SECOND ARMY
(Illustrating the Plans of Generals Jilinski and Samsonov)



S.D.O. No. 6991, 9-32.



Ortelsburg, Neidenburg and Soldau were occupied by our troops on the evening of the 22nd. August. At the same time it was discovered that the Germans were closing in westward in the Gilgenburg area.

On the evening of the 22nd. August, when reporting the occupation of Ortelsburg, Neidenburg and Soldau to Army Group Headquarters, General Samsonov considered it necessary to remind them of the complete disorganization of the lines of communication. "It is essential to organize the lines of communication, which has not yet been done," he stated in his telegram. "The country is devastated. The horses have long been without oats. There is no bread. Transport from Ostrolenko is impossible."

(*To be continued.*)

A SPASM.

(Due to Internal Unrest).

By Phoenix.

There are, I believe, supermen who can sit down and read such works as Field Service Regulations, the Army Act, and so on.

(*i*) Without going to sleep.

(*ii*) With some benefit to themselves.

The ordinary kind of man has to have some incentive in order—

(*i*) To avoid going to sleep.

(*ii*) To grasp what it is all about.

Incentives include, for instance, a promotion examination or one's last shot for the Staff College, the fact that one has to speak at a Tactical Discussion or find a sound reason for an unsound action which has been censured by the C. O.

There is, however, one other stimulant to interest and understanding and that is Experience. It is so easy for a senior officer, all plastered with war medals. He opens his F. S. R. and reads :—

"— will depend on—

(*i*) The nature of the country.

(*ii*) The strength of the enemy.

(*iii*) The weather.

(*iv*) The plan of the higher commander—"

and so on. His eyes gleam with interest! Why? Because it all reminds him of the Somme in '18, or Ypres in '17, or Shaikh Sa'ad in '16, or Tanga in '15 or Crecy in something or other.

"How true! How true!" he murmurs. He neither goes to sleep nor does he fail to get a kick out of it.

Now answer me this. How many of us really have any experience of Aid to the Civil Power? D——, I mean, very few. All right. That being so, how can you expect to read intelligently all the instructions, rules, laws and things on the subject? I'll tell you—by reading the following experiences of my young friend Bobby B.

II.

Bobby was desperately keen and enthusiastic. Enthusiasm is his father and temerity his mother as one might say. So, when he came out to India a full-blooded 2nd. Lieutenant, he was quite decided in his mind to do everything a soldier should do. He had read several (abridged) lives of great men, and very rightly considered that what was good enough for Marlborough, Wellington and Stonewall Jackson would do nicely for Bobby B. Anyway he intended to take his profession seriously and get all the experience he could by fighting Pathans, Nagas, Kashmiris and what not.

It was therefore a terrible blow to his martial ardour when he joined his regiment in Bombalpur, shall we say, and found that in a year it was due to move to Lucknabad, so to speak. The blow was the more bitter when he discovered that in both places his regiment was allotted to Internal Security and not to the Field Army.

He soon found that there were compensations for his enthusiastic mind. He had not been a month in Bombalpur before a friend in the Indian Police, who had been at his public school, said to him,

"There are going to be doings in the city during the Muharram. I expect you fellows will be called out in aid."

Now, this was a new one on Bobby who had so far spent his time on the barrack square relearning his drill, which the Adjutant seemed to think he had forgotten during the two months since he left Sandhurst, and doing musketry and things. Tactical training and so on had not yet been meted out to him. So Bobby was completely mystified by the Policeman's remark and replied

"Oh ! Really ! You mean—? "

The policeman who had been out in the country for two years (and had also been captain of the school rugger fifteen) looked pityingly at him, nodded, and walked away.

Bobby felt shamed and worried. Next morning he asked his Platoon Sergeant, quite casually of course, whether he had been out in aid of the Muharram at all. The Platoon Sergeant, who was lately out from the Home battalion, had not ; but naturally he did not say so.

"That will be quite all right, sir," said he, "You don't need to worry about that, sir. I was in Ireland you see, sir."

So Bobby stifled any qualms he may have had. After all there couldn't be much in it. The majority of natives he had observed in Bombalpur were a measly looking lot, and the very sight of Bobby at the head of his platoon would doubtless put them to flight. Nevertheless Bobby was keen, as I said, and after lunch he had a look through F. S. R. I. and II. and also Infantry Training Vol. II. He was on the point of opening his Manual of Military Law when he fell asleep. This was bad luck because he was getting 'warm' in his investigations as one might say. Not that the Manual of Military Law would have been the slightest use to him because the Indian Penal Code and extracts from the Code of Criminal Procedure, which tell one something about these things, happened to be in the Manual of *Indian* Military Law which as a self-respecting British Service officer Bobby very naturally did not possess.

A few days later he found himself with his platoon, paraded in front of a line of lorries all ready to move off in aid of the Civil Power—whatever that might be. The Adjuant was giving a lot of, to Bobby, completely incomprehensible instructions and ended up by saying,

"Whatever you do, remember—Minimum Force, or else we'll all get into the devil of a row."

This remark gave Bobby much food for thought as they rattled along the street into the bowels of Bombalpur city, which was completely strange to him.

Suddenly, on reaching a place where several roads met the two lorries containing his platoon stopped and he observed the Company Commander (who was always very rude to Bobby) talking to a police officer.

"This will be your piquet position, B.," he said? "You are to watch all roads coming into this square. Get busy with it. I'll be back when I've fixed up the other platoons."

Bobby's mind worked quickly.

"Am I to make barricades, sir?" he asked.

"Don't be a damned fool. These are communal riots, not the lines of Torres Vedras. Oh! by the way, there's your magistrate. Take your orders from him."

Bobby gazed upon his magistrate. He had always had a vague idea that a magistrate was an elderly kind of bloke with a wig,

spectacles and a gown. This one was an anaemic, emaciated and very nervous individual who bore a marked resemblance to one of the Mess khidmatgars. Bobby didn't feel at all like taking any orders from him.

There were six roads leading into the hot and dusty square. Bobby put a double sentry on each and collected the remainder of the platoon beside a kind of disused fountain near the centre of the square. The sentries were given orders to report at once any movements of the enemy—as you were—suspicious looking Indians. So far, so good, but Bobby knew a lot about war and was not going to remain inactive. Two patrols, of a corporal and three men each were detailed to reconnoitre the roads round the post. He couldn't explain much to them because the Company Commander had the only map of the city available and none of his N. C. O.'s had ever been in this part before. His reserve was now reduced to twelve men which, as the Platoon Sergeant pointed out, was not enough for reliefs for the sentries.

It was at this point that Bobby remembered the card, I.A.F.D.-908 which had been issued to him the previous day from the regimental office. He sat down to read it.

"*Act in closest possible communication with the Civil Authorities throughout.*" Bobby glanced up. The magistrate was about three yards away. He didn't want him any closer than that!

"*Maintain inter-communication if possible by telephone.*" If that meant inter-communication with the Civil Authority a telephone was not necessary; he could talk direct. If it meant inter-communication with the rest of the Company—well, he hadn't the faintest idea as yet where it was, and anyway he had no telephone. He told the Platoon Sergeant to look round for a Telephone Office or Box in the neighbourhood. The magistrate here spoke up.

"There is telephone in shop of Ramatool Friendshipwala, wine merchant." This was some two hundred yards from the piquet but was something, and he could talk to the regimental Orderly Room. It was not till later that he discovered that Mr. Friendshipwala had closed and barricaded his shop, and access to the telephone was not possible.

"*Avoid using small parties as far as possible and never use sin gle men.*" That was all right so far as the sentries were concerned. He had posted them in pairs; but those patrols!! He hoped they would be back before the Company Commander returned.

"*The military are not to be used as Civil Police.*" Now, what the——did that mean ? It said already that single men were not to be used, and Civil Police always so far as he knew walked about singly. Why repeat the caution ? He was puzzlin gover this point when the sentries on opposite sides of the square spoke simultaneously.

"Lot of suspicious looking Indians at the end of the road, sir."

"Kind of procession like, approaching the piquet from the west, sir."

"Load" roared Bobby, who as I said, was a quick thinker.

"Sir, you must not fire without my order." The magistrate had become extremely agitated.

The Lewis Gun section commanded the road now occupied by the suspicious looking Indians. The remainder of the Platoon some ten rifles in all, were drawn up across the other road blocking the approach of the procession.

Suddenly Bobby remembered the Adjutant's final warning anent Minimum Force. He had not yet quite grasped the meaning of this. It seemed to him that his platoon was already a minimum force for the job in hand and they were scattered all over the place. Orders were orders however (and besides the Company Commander might arrive at any moment !), so he withdrew two men of the party of ten, into reserve as it were. Surely, he thought to himself, eight rifles is about a minimum force for blocking a road.

The procession, which seemed to be several hundreds in number, had stopped on seeing the military across the road ahead of it. A tall, thin man, to whom Bobby took an immediate dislike was haranguing the crowd.

On Bobby's enquiry the magistrate said, "Sir, the man is telling them that this is a public thoroughfare and that they are a peaceful procession and that no one has the right to stop them."

"Tell them to go another way and that they can't come along here." Bobby was firm.

The magistrate went forward a few paces and shouted to the crowd whereupon the tall, thin individual approached, followed by the procession. He addressed Bobby in English.

"Your Honour has not right to prevent us using this public right of way. We are peaceful group of persons pursuing peaceful avocations. We are doing no harm to any person or thing. We are not therefore unlawful assembly."

Bobby was puzzled. He had been told to watch the roads leading into the square and to take orders from the magistrate.

"Well, magistrate, what about it?" he asked.

"Sir, this is legal point. I am uncertain."

The Corporal standing next to Bobby spoke, "Beg pardon, sir, but perhaps if I gave the chatty bloke a clip over the head with my butt it might help him to choose another road."

At this moment several things began to happen simultaneously. The suspicious looking Indians on the other side having caught sight of the procession across the way became much excited and their numbers increased rapidly.

"Can I fire on this lot, sir? It is looking a bit dangerous over here." The N. C. O. commanding the Lewis Gun section had an anxious look.

"No. You can't. Wait for orders." Bobby was getting cross. The procession had stopped but the noise was increasing and there were shouts of defiance. The Platoon Sergeant's voice at the head of another side street could now be heard.

"No. You can't come this way. So back you go. *Footsack! No bon! Mafeesh!*" The sergeant appeared to be a linguist.

An angry voice replied to him. "You cannot prevent me. I am M.L.A., Bombalpur Legislature, and I claim protection of military. My car is smashed by Mohamedan rioters and I wish to go to my house."

As Bobby turned to investigate this new complication a stone struck him on the helmet and another hit the ground near by. The Corporal looked towards him expectantly. The magistrate was registering an agony of indecision. A broken soda-water bottle hit one of the men full in the face opening his forehead and cheek which poured with blood.

Out of a side street now appeared the Company Commander, in a car, accompanied by a Police Officer and two armed constables. The former took in the situation at a glance and turned to the magistrate.

"I am going to disperse this crowd. Do you agree?" The magistrate nodded. "Into them with the bayonet, B."

At this moment, in the distance, two shots rang out. The suspicious looking crowd in the street facing the Lewis Gun section melted away as if by magic. The procession too was in full retreat leaving two on the ground who had been unable, owing to pressure from the crowd behind them, to avoid the steadily advancing line of bayonets. The Police Officer examined the fallen men and a smile of satisfaction spread over his face.

"Good," he said. "This is a man we have wanted for a long time." It was the tall, thin individual.

No one would accuse Bobby of being too calm and collected. This was exactly the kind of stuff he wanted and he was scarlet with excitement and satisfaction. Here was his platoon attacked from three sides. On one, a riotous procession; on the other, a threatening crowd and on the third, a voluble M. L. A.; and they had all been repulsed. Good work.

He had failed to see the danger approaching from the fourth side.

"And now, young fellow, will you explain to me what you have done with your rose coloured platoon?" There was a kind of suppressed look in the Company Commander's eye which made Bobby go suddenly cold.

He explained his dispositions, slurring over to some extent the matter of the two weak patrols.

"Exactly! Weak everywhere and strong nowhere." The Company Commander looked grim. "Just come out of earshot of the men. I have a few remarks to make to you," he said.

"The first responsibility of a commander, Mr. B.," he went on, "is the safety of his men. I arrive here and find your platoon scattered about in small packets, any or all of which could have been rushed and swamped by a determined crowd. Luckily for you the Indian in this part of the world is a comparatively weak-kneed individual. Farther up north you would have been for it. You allowed a threatening crowd not only to come close to your men, but you actually permitted them to stone you and badly damage one of them. That man Thompson will probably lose the sight of his eye, poor chap."

Bobby was indignant.

"How could I do anything without the magistrate's order? You told me——"

"When your men are in danger there is no question of waiting for a magistrate's order." He let this sink in for a moment. "And now, can you tell me where your two patrols are?"

"No, but I told them not to go far."

"Exactly. You let them loose in this maze of an Indian city and expect them not to lose themselves. I'll tell you about one of your patrols. There it comes."

Bobby noticed that one man had his arm bound up and that the Corporal was going lame.

"That bright patrol of yours lost itself. When it turned into the main market street it found itself hemmed in by an excited crowd of Mahomedans. The Corporal did his best to get clear but had to use his butts to do it. This attracted some Pathan *badmashes* who closed with them and got away with one man's rifle. Fortunately the Pathan ran straight into a police patrol and we have got the rifle back. Perhaps that will show you the danger of using weak patrols on these occasions."

The Police Officer now came up.

"We have patched up those two bayonet wounds, and I'll take them off to hospital. I had better take your man too? By the way, have you discovered who fired those two shots. They must have been responsible for clearing the Mahomedan crowd away on that side."

Bobby had an uneasy feeling that his second patrol might have got mixed up in a scrap. He was saved the trouble of further investigation by its appearance at the far end of the street. The Corporal made his report.

"I sent O'Leary and Jones ahead as scouts, sir," he said, "about fifty yards ahead of me and Simpson. We reconnoitred the roads on this side. I have made a rough sketch of them, sir. Most of the roads were deserted, sir, but as we turned back in this direction we came across a few natives walking along. They seemed to be quite peaceful. When we turned into the main street back over there, two Indians with beards ran out of a house and stabbed two others who

were passing. I shouted to O'Leary to stop them, but they were too quick and ran up a side street. O'Leary and Jones each fired a shot at them, sir, but missed. The wounded Indians were taken into a house by some others. I then brought my patrol back here, sir."

" Don't split up your patrol like that again in this kind of work. Keep together. And I don't like that firing . . . . ." The Company Commander looked distinctly puzzled and this surprised Bobby.

" Surely that was all right " he said, " They had to do something about it."

" I'm not too sure. A N. C. O. can take action only in protection of his men or property in his charge. Even an officer unaccompanied by a magistrate, can only disperse an unlawful assembly, and I don't think you can class two cut-throats as an unlawful assembly. I'll go into that later and let you know."

" And now, my lad, I want you to realise that you have made about as big a mess of this show as you could—"

At the end of half an hour Bobby had been reduced to a proper sense of his complete uselessness as an officer and leader of men; but, as I said before, he was full of enthusiasm and soon recovered. Before his platoon had been dismissed late that night his active mind had formed several conclusions. These he wrote down in his note book. Right or wrong they may be of interest. He showed them to the Company Commander, and for convenience sake the latter's remarks are given in their appropriate place.

" *Aid to the Civil Power is no job for the soldier. He is armed with fighting weapons and is not allowed to use them.*"

(Company Commander :—Quite so ! but the army in India has no other job in peace, and, in war, a large proportion of it is reserved for Internal Security purposes alone).

" *The safety of the men is my chief responsibility. Since they cannot, in the ranks, take action to protect themselves, I have to take it for them.*"

(C. C. : Quite right. In other words, do not let a crowd get so close to them that they cannot fire, or so near that they can close with the troops hand to hand. It may be difficult to do this. You must use your ingenuity. I once got the magistrate to warn a crowd that any man crossing a certain line would be fired on. I did not have to fire !

If a crowd stones or attacks your men, fire at once. Always fire for effect, at the actual offender if you can. One shot will generally be enough if you act soon enough.

(C. C. :—Oh ! yes, I know I told you to go in with the bayonet yesterday. That was because you had let things go too far and there was'nt time to issue controlled fire orders. I took a risk I know. Hand to hand work is to be avoided if the crowd shows any fight).

"*Do not send out small patrols—never less than a section of eight men.*' "

(C. C. :—Yes. Stick to military units, that is sections or platoons. If people are hostile to the troops you take a great risk in patrolling with less than a platoon. In communal disturbances you can probably use sections, but remember they can do nothing except self-protection unless accompanied by a magistrate or policemen in whose aid they can act).

"*Find out the meaning of 'The military are not to be used as Civil Police.*' "

(C. C. :—That is difficult to explain. I will try, but remember that these are only my private opinions.

Troops are only allowed to use the weapons with which they are armed. Since they are so strongly armed it is necessary to protect the public from them. They are therefore not given the same protection by the law as policemen are. That is one of the reasons why soldiers cannot use police methods in these cases.

There are times when troops will have to do certain police duties, for instance when the police are insufficient in numbers, or tired out or fully engaged in another place. Of course, the duties we may have to do are those definitely due to and connected with the riots or disturbances. We cannot be asked to do normal or routine police duties.

The crux of it all is that whatever we do *we must not use police methods.* We are not trained or armed to use police methods.

The police employ actual contact with the people. They mingle with and accompany crowds. They attempt to divert, stop and control crowds by physical contact and pressure. They allow single constables and small parties to be scattered about an area. Experience has shewn that these methods are suitable for men armed as policemen

and trained to the work, and, I may add, permitted by law to take action which we soldiers are not allowed to take. The police methods are suitable for normal conditions and, up to a certain point, in abnormal times. They definitely cannot be used by forces armed as we are and who are brought in to act at the stage of disturbances when it is necessary for troops to take action.

All this accounts for the warning in our instructions and the fact that the military commander is made responsible for the action the troops take. Were it not so, police officers would, of course, attempt to use soldiers in the manner of police, with fatal results. I imply no slur on the Police. They, very naturally employ methods which they understand and to which they have been trained.)

"*Troops cannot legally take action against individual murderers only against unlawful assemblies of five or more persons.*"

(C. C. :—That is not correct. There is the right of private defence which entitles any man to protect himself or any other person or thing. You will find it clearly put down in sections 96 to 102 of the Indian Penal Code in the Manual of Indian Military Law.

O'Leary and Jones did wrong in firing at those two men yesterday. Under the Right of Private Defence they could, strictly speaking, only take action while the fear of danger lasted. In that case yesterday the danger had already ceased. Therefore, in my opinion, they could not act under the right of private defence.

As private citizens, however, they had the right and duty of effecting the arrest of men who had committed a non-bailable offence. Look up the Code of Criminal Procedure, Section 59. Even then, in my judgment, they had no right to fire, since they were not requested to do so by a policeman or magistrate. You must warn your men not to do so in future, except, of course, in the right of private defence.

If, therefore, you want to send out military patrols to enforce an order such as a curfew order or to prevent crime, you must see that they are accompanied by a magistrate or policeman in whose *aid* they will act."

"I see", said Bobby B.

But when he came to think it over he found that visibility was still not too good. He wondered how much more there was for him to learn by experience.

Anyway he decided to have a dive at these mysterious books on law. To his astonishment he found them almost sane and intelligible. It must have been quite half an hour before he fell asleep.

EDITOR: *This article is based on an absurd assumption. No officer as ignorant as Bobby B. would have been allowed to go out in aid of the Civil Power.*

PHOENIX: *Of course not. That's why I enclosed a stamped envelope.*

A HOLD UP IN ANATOLIA.

By Captain E. R. Greer.

I.

The opportunity of a journey by car through Anatolia is not one thatf all sto the lot of many Englishmen, even in these days of universal motoring, and it was therefore with alacrity that I accepted the invitation of Major H., the military attaché to the British Embassy in Stamboul to accompany him on a tour of the Anatolian Provinces of Asia Minor. Being myself in Stamboul on language study from my regiment in India at the time (1929), the prospect of a three weeks' motor tour was a welcome change from grappling with the intricacies of the Turkish language. Further, having motored a good deal in such countries as Persia and Baluchistan where some of the roads, if indeed they can be called roads, are indescribably bad, I imagined that I knew fairly well what we were in for. I was destined to be disillusioned on that score before the end of our trip.

Preparations for a motor tour in an undeveloped country naturally require a good deal of forethought. Petrol, we knew, could be obtained at various towns on our proposed route, but food and lodging were not so easily to be found. Major H., in whose car we were to travel, settled the latter problem, fixing up an ingenious arrangement by which the front seat of the car was made to tip backwards and join up with the back seat, thereby forming a not uncomfortable, if slightly cramped bed for two. He also fitted a mosquito net to be let down from the roof for use when necessary. We were thus independent of *serais* and rest-houses with the accompanying breeds of insects, crawling and flying, which infest roadside hostelries all over the East. We were obliged to take a quantity of tinned food with us, but we determined to keep it as a reserve, and to live on the country as much as possible.

Our proposed route lay through Brusa, Eskishehir and Afium Kara Hissar to Konia. From there we intended going through the *Vilayets* (Provinces) of Kayseri, Sivas, Tokat and Amasiya, to Angora, returning to Stamboul by a northern route. This itinerary which was to cover some 1,500 miles was planned subject to the state of the

roads and the conditions of the country, about both of which we possessed only the most meagre information.

One fine morning in June, we shipped the car from Stamboul across the Sea of Marmora to Mudania, the scene of the Armistice between General Sir Charles Harington and the Turks in 1922, and from there started for Brusa. The first one hundred miles or so being fairly well populated, we found the roads good and no difficulties whatever were encountered. The country near the sea coast is of striking beauty. Ranges of mountains covered with pines and cypress trees and neat well-kept villages leave a pleasing impression, and the snowy peaks of Mount Olympus tower above the landscape. As we got further into the interior the country underwent a complete change. Thinly populated and barren, with occasional bleak hills dotted like islands on a bare plain, one can travel for hours without seeing a sign of life. The soil is poor and only in the vicinity of the few streams are any signs of cultivation to be seen. Extremes of heat and cold in summer and winter add to the difficulties of life, and breed a hardy race in the Anatolian Turk.

The Turks have an ambitious road programme in hand, and we certainly came across a good deal of what might be called " road activity." Our principle concern, however, naturally lay in the state of the roads as we found them at the time, and they were in a sorry condition. In the proximity of towns they were generally good, but beyond that they petered out into cross-country tracks overgrown with grass and completely neglected.

Such maps of the country as are available are very inaccurate. The direction of the roads changes continually. Diversions, sometimes of several miles, are frequently made by cars finding the " main road " impassable. The result is often confusing, and roads and tracks radiating in all directions are very bewildering to the traveller. We often lost our way and had to go back on our tracks for several miles to get on to the right road again.

The small amount of motor traffic in the interior was very noticeable, and in view of the great development of motor transport in Eastern Countries generally during the past few years, this is all the more remarkable. In Persia and India one passes on a day's journey numbers of the ubiquitous " Chev " or " Dodge " lorries and cars laden to the roof with passengers and goods, and one

never ceases to wonder how they ever get anywhere without the vehicle falling to pieces on the road. In the country districts of Anatolia we did not see a single lorry and only one or two cars.

The Anatolian Turk is a very different type from his brother of the town. The new European modes and customs have not yet penetrated into the interior and we found the Turk there just as he must have been fifty years ago. The comparison was in favour of the country peasant. In Stamboul and other large towns the picturesque baggy trousers and turban have almost disappeared and the modern Turk wears the felt hat and lounge suit of Europe. He has no option in the matter, it is the law, and however he may dislike having to discard his ancient dress, he is forced to do so. Once in the interior we felt that we were back in the Turkey of the ancient Sultans. The people are all peasants and eke out a precarious existence on the barren soil. Poverty appears to be rampant and the standard of living low. In spite of this, the old traditions of Eastern hospitality still flourish. We had frequent experience of this when halted near villages during our tour. The headman invariably came out to greet us and insisted on our partaking of a meal before we proceeded on our way.

On one occasion when we had taken the wrong track out of some village and had lost the road, we picked up a peasant at a small hamlet who offered to accompany us to the next large town, one hundred miles away. He informed us that we would have great difficulty in finding the way without assistance, as there was no road for miles, and he said he would pilot us to our destination and return to his home on foot. On asking him what he wanted for his services as guide he said he would be very happy with four *liras* (eight shillings), but would take less if we thought that excessive! We took him along and eventually dropped him at our destination with a liberal tip and a couple of tins of fruit. He thereupon started off on his one hundred miles trek home singing and dancing down the road we had just come by. He told us on parting that it was years since he had possessed such wealth as was now reposing in his belt.

On the third day after leaving Stamboul we reached Afium Kara Hissar, an important railway junction on the Turkish—Iraq Railwa y and one of the largest towns in Anatolia. During the Great War Afium was the site of a large British prisoners of war camp and there

are doubtless many British soldiers who have lively recollections of the place. Later, in the Greeco-Turkish War (1919—22), Afium was the scene of much fighting when it was captured by the Greeks in 1921 and finally re-taken by the Turks a year later. It is an interesting place, typically Turkish, with its rows of tall wooden houses and ancient mosques and minarets, while jutting up in the middle of the town towers a great black rock several hundred feet high, from which the place takes its name of Kara Hissar or Black Castle.

Major H. paid an official call on the Commander of the troops at Afium and was received with much courtesy. On our departure a Staff Officer accompanied us for some miles out of the town to put us on the right road.

The following day we reached Konia where we spent a night at the local hotel—a course which we had cause to regret before next morning. Sleep was out of the question and we spent the night in repelling with a tin of " Keatings " the attacks of innumerable bugs of varying shapes and sizes which appeared from every corner of the room as soon as the lights were put out.

II.

It was beyond Konia that our real adventures started and we ran into tragedy in the lonely Anatolian country-side.

We had reached the small town of Karaman where we heard reports of flooded and impassable roads due to heavy local rains. Nevertheless we decided to push on about fifty miles to Eregli which we hoped to reach in one day. The roads were vile, and soon after leaving Karaman we saw that the reports of floods were not exaggerated. The country here is very low-lying and we found the road little better than a swamp in many places. Major H., who was a very fine driver indeed, did his best, and we shot through great pools of water and skidded through quagmires in our endeavours to get on, but it was a hopeless business. We soon got bogged in a sea of mud a few miles out of Karaman, and stuck there for three hours while we endeavoured to round up men from the nearest village to pull us out. This accomplished, we went through the same performance another few miles further on, and by nightfall we had only covered some fifteen miles. By this time we were hungry, tired and covered with mud from head to foot, and we therefore decided to spend the night in

the car outside a small hamlet and hope for better things next morning. Meanwhile we found ourselves the centre of interest of a small crowd from the wayside hamlet and soon got into conversation with the inhabitants. When we told them our next destination, two of them pushed their way forward through the crowd and offered their services as guides. They were a curiously contrasted pair, one dressed in old-fashioned European clothes with a battered felt hat pulled down over a villainous-looking face. The other a respectable-looking old man wearing the turban and baggy pantaloons of the Anatolian Turk. The latter told us in course of conversation that his name was Mustafa and that he was the proud father of sixteen children. Seeing a heaven-sent opportunity of earning *bakhsheesh* for the support of his large progeny he expressed an earnest desire to act as our guide, saying that he knew of a route over high ground which was not under water, and swearing by Allah to bring us safely to the town which was our next stopping place. Although it was by this time dark we decided to push on the thirty or forty miles in the hope of finding a hot meal and a bath. We therefore yielded to Mustafa's assurances, put him in the back of the car, and started off. This arrangement was strongly disapproved of by the other would-be guide who jumped on the running board of the car volubly declaring his intention of accompanying us. We told him that one guide was quite sufficient but he refused to listen to reason and I was obliged to push him gently but firmly off the running board. We left him standing on the road on the outskirts of the village glaring and cursing after us.

We had not gone far on our journey before it was apparent that our newly found guide was taking us a long way off the direct route. After a lot of gesticulating and a torrent of Turkish we gathered that he was obliged to take us a wide detour of some fifteen or twenty miles to avoid the flooded area and that we would join the direct route at a point about six miles from the village which we had just left. We would then be on the so-called main road again which was clear of floods from there on. A twenty mile detour to get to a point only six miles away in a straight line seemed a round-about business, but feeling too tired and bored to argue the question at any length, we accepted the inevitable and hoped for the best. The track we were on could scarcely be called a track at all and we were actually driving across country most of the time. However, our headlights were good

and our guide seemed to know every inch of the country, so we began to hope that we would reach our destination by midnight.

I was sitting in the front of the car beside Major H. with Mustafa in the back, now quite at home and smoking numbers of our cigarettes. The night was dark and silent and I had settled back comfortably in my seat preparing to doze when I was suddenly and unpleasantly brought to my senses by the crash of a rifle bullet at close range. It smashed through the windows of the car, covering us with splinters of broken glass. Almost before we had time to realise what had happened another shot followed. I saw the flash of the explosion not twenty yards way. With a groan our guide fell back in his seat. Major H. involuntarily stamped on the brake and pulled up and we both sprang out. I dodged round the front of the car and found myself presenting an excellent target in the full glare of the headlights before realizing that they had been left on. We instinctively stood away from the car, an obvious target for further bullets. We were unarmed, it being deemed inadvisable by the Powers that Be for us to be in possession of arms when travelling in Anatolia. So we were helpless. We could do nothing but peer into the darkness and wonder what was going to happen next.

A minute passed and no one appeared. Then two more minutes and still no sound except for the moaning of the unfortunate Mustafa who was lying on the floor of the car. It was apparent that the poor fellow had been badly wounded. When another minute or so had passed without anyone showing himself we discussed our next action in low tones. It was indeed a case of " What does A do now " ? Should we go back or forward ? It was obvious that our guide could guide no longer and we had no hope whatever of finding our way to our destination across-country in the dark without his help. Therefore to go forward was ruled out ; but to go back seemed almost as hopeless as we had nothing to guide us, the road being, as I have explained, almost non-existent. The only hope was that we might pick up the tracks our car had made, but the darkness of the night would make this a difficult business. It was obviously our first duty to obtain medical assistance for Mustafa as soon as possible so we determined to return the way we had come and try to get back to the village we had left an hour or so before. Once there Mustafa would be with his own people again. This settled, Major H. walked over to the car and took his seat at the wheel. It was a ticklish moment

as for all we knew there might be rifles trained on the car waiting for us to return to it. But the enemy, wherever he was, gave no sign. Major H., pressed the starter, swung the car round and we were off back the way we had come.

I stood on the running-board and tried to pick up our old track, but I could see nothing, and we had not gone half a mile before we were completely lost. We stopped and got out of the car and judging ourselves to be out of the enemy's field of fire examined Mustafa's wound by the aid of a pocket torch. He had been hit just where the arm joins the shoulder. It was a horrible wound and it was apparent that the bullet was a dum-dum as his arm was nearly severed from his shoulder. We bandaged it up with our handkerchiefs, applied a rough tourniquet and forced some brandy from a flask down his throat, but it was little we could do for him with the means at our disposal. We then proceeded to search round for some signs of our previous tracks. Eventually we found the marks of tyres, but it was not long before they completely disappeared on a hard piece of ground and we were again obliged to stop the car and make a further search round. The night was cloudy, so we could get no help from the stars. It is a most unpleasant sensation to feel oneself completely lost, as we were, and I have no wish to repeat the experience.

It is unnecessary to go into details about the three hours which followed. Sufficient to say that we picked up our old tracks a dozen times and lost them again as often. Mustafa had relapsed into complete unconsciousness in the back of the car and we gave up all hope of getting help in time to save his life. We had almost decided to sit down and wait for daylight when we found ourselves on an ancient broken-down culvert which we immediately recognised as having crossed shortly after setting out from Mustafa's village. From that point onwards all was well. The track was clearly defined and in the very short time we found ourselves on the outskirts of the village. Here a fresh problem presented itself. How were we to account for our return with Mustafa lying desperately wounded in the back of the car ? Could we explain in our very indifferent Turkish what had happened and what was more to the point, would we be believed ? What would the villagers' attitude be towards a couple of "ferengis" who had descended out of the blue a few hours previously, picked up one of their pals, and were now returning with him

unconscious and dying in the back of the car ? The outlook was not too bright, for these were wild and primitive people. However, we had no choice but to go through with it, so we drove into the sleeping village blowing the horn and shouting to the inhabitants to turn out.

In a few moments we were surrounded by a crowd. A lantern was brought and its light showed Mustafa lying in a pool of blood in the back of the car. For a few moments things looked unpleasant. The villagers seemed to make up their minds at once that we were responsible and closed round us with threatening attitudes and scowling looks. We were vainly trying to explain what had happened when by a great stroke of fortune, Mustafa, who was being lifted from the car by his friends, recovered consciousness for a few seconds. He gasped out a few words and almost at once lapsed again into insensibility. But it was sufficient to turn the villagers from enemies into friends and their threatening attitude immediately changed to one of helpful friendliness. We at once offered to drive the car back to Karaman where the nearest doctor lived and fetch him back to the village. We thought it wiser to leave Mustafa behind, partly because we judged him too far gone to stand any more jolting in a car and partly because we did not know what fresh troubles lay on the flooded road to Karaman which had delayed us so much the previous afternoon. The villagers, who were now our firm friends, agreed.

It was by this time about midnight and taking one of the villagers with us we started back on the fifteen mile journey to Karaman Major H., had been driving for hours under vile conditions and practically without a break, but he was indefatigable and it was due to his skill at the wheel that we got through without difficulty and arrived at Karaman about an hour later, where we went at once to the local police station. Here we met with interminable delays. The Captain of Gendarmes, who was summoned from his bed and appeared after some delay, insisted on recording our statements before he would do anything else. It was in vain that we protested that our statements could wait and that we had come to fetch a doctor for a dying man. It appeared to us that it made no difference if the whole population of Anatolia was in its death agonies ; official routine demanded first and foremost a statement in writing. Seeing it hopeless to argue we told him as briefly as possible, using French and Turkish

indiscriminately, what had happened. He took down our statements with maddening deliberation and an hour went by before he expressed himself satisfied with what he had written. In the meanwhile a doctor had been found, and putting him in the car together with the Captain of Gendarmes and a couple of his men, we started back for Mustafa's village. On the way we passed several parties of mounted gendarmes riding hard for the same destination, so it was apparent that our friend in command had taken some action.

Dawn came on the way and we reached the village in broad daylight. There we found more mounted gendarmes and we were informed that still more parties were out scouring the country-side in the direction where the shooting had occurred. The doctor carried out his examination of our wounded guide and expressed his opinion that, though very weak from loss of blood, he would probably live. This information naturally cheered us considerably.

In the meantime the villagers, with the unfailing hospitality of the Anatolian peasant, insisted on preparing a meal for us which we were more than ready for, having had no food for over twelve hours. Just as we had finished we heard a great hullabaloo outside the village and a party of gendarmes appeared dragging along at the end of a rope an unpleasant-looking individual in dirty European clothes with a battered felt hat pulled down over this eyes. It was the same man we had pushed off the running-board of the car not twelve hours before!

Much investigation and cross-questioning followed and our Captain of Gendarmes eventually told us he had got the whole story. According to his account a feud over a woman had been in existence for some time between the villainous-looking gentleman in European clothes and Mustafa. For months the former had been waiting his opportunity to put Mustafa out of the way and finally thought he saw his chance when we picked on Mustafa as our guide. He did his best to accompany us hoping apparently to find some opportunity of settling accounts with Mustafa when they had left us at our destination and would be returning to their village together on foot. This plan having failed when the was pushed off the car, he at once determined to cover the six miles or so along the main road on foot, knowing that he could reach the same point where we would arrive, after our twenty mile detour, before we could get there. He rushed to his house,

seized his rifle, got to his position with a few minutes to spare, and fired into the car from a distance of about 15 yards as we passed him. This, the Captain informed us, was the true account of the incident and he went on to express the deepest regret at the inconvenience to which we had been put and the unfortunate chance which led us into unwittingly getting mixed up in a private vendetta. He added his personal assurances that the unpleasant-looking individual in question would soon be swinging at the end of a rope.

We pointed out that if this account of the incident were really true, then all we could say was that Mustafa's enemy had gone about getting rid of his rival in a curious way. To fire into a car travelling, at fifteen or twenty miles an hour in the dark and hope to hit the person intended, struck us as being a bit optimistic, not to say dangerous for the other passengers. Our friend assured us that such a target would present no difficulties whatever to men with the high standard of marksmanship of the Anatolian Turk !

We could see that our gendarme friend wanted to convince us that the crime was the outcome of a personal vendetta. He foresaw that awkward complications might ensure should he be unable to produce a satisfactory account of an incident in which two British officers, one of them the Military Attaché, driving in a car with a British Embassy number, were fired at and held up on the road. The Turkish authorities prided themselves that under the new regime Anatolia was safe for the traveller and had publicly declared on several occasions that the bands of brigands and robbers which had for some years infested the interior had now been completely stamped out and that travellers could go where they wished with perfect safety. Unless, therefore, some good reason could be put forward for the adventure which had befallen us the British Embasay at Stamboul might make the incident the subject of an official protest. This, we guessed, was in our gendarme Captain's mind.

Our opinion of the affair was that we had been held up by some wandering thieves or brigands who saw the lights of our car in the distance and lay up on the roadside for us. They were probably under the impression that the car contained some local merchant from whom loot might be reasonably expected. Having fired into the car they heard our voices, and realizing that we were foreigners,

became frightened of the consequences to themselves and beat a hasty retreat.

However, we were obviously not in a position to prove the truth or otherwise of the story we had been told. Being strangers travelling in a foreign country we were naturally unable to dispute the opinions of the police, whatever we might ourselves think of them. We therefore made our adieus to our gendarme friend, having assured him that we would take official steps to have our thanks expressed to him for the trouble he had taken on our behalf.

The Anatolian Gendarmerie impressed us as a very efficient force. Almost every village had its gendarmerie post and the whole country is systematically patrolled by mounted gendarmes. All villages of any size have a telephone and in an emergency the gendarmes of the area concerned can be warned and quickly got on the move. The officers and men are recruited from the pick of the army. We met with nothing but courtesy and kindness at the hands of the various Gendarmerie officers with whom we came in contact during our tour. The insistence of the officer at Karaman on getting our written statements before he would move from his Headquarters was annoying, but is probably not uncommon in the police forces of even more highly organized countries. Certainly there is no question that the state of the interior of Anatolia has improved very considerably during the last few years. Previous to that bands of brigands roamed the country-side and travel in the interior was a hazardous undertaking.

III.

Having left the little village which had been the starting point of our adventurous night we had to decide on our next step. Our gendarme friend had told us that the whole country-side ahead of us was under water and that road communications were almost completely cut in the direction in which we wanted to go. We therefore decided to cut short our itinerary, return on our tracks to Konia and go from there to Angora, the capital. We reached Konia the same evening, stopping on the way for a couple of hours sleep and a bathe and shave in a wayside stream. With the recollections of insect life in the local hotel at Konia fresh in our memories, we determined to drive a few miles out of the town and spend the night in the car by the road-side. While at dinner in the hotel we received a message from the *Vali* (Governor of the Province) to the effect that he hoped

to see us before we left Konia. We therefore went round to his office after dinner where he presently joined us full of apologies for the adventure which had befallen us. He had been informed by telephone of the details of the incident and repeated the same story as that given us by the Captain of gendarmes. He added that the unfortunate Mustafa had died shortly after our departure from his village, but before dying had made a statement corroborating the story of the feud. We were naturally distressed to hear the news of the old man's death but the *Vali* assured us that the Government would compensate the family for the loss of the head of the house. We found in the *Vali* a very courteous Turkish gentleman. He insisted on sending his own car to accompany us to Angora, some 170 miles away. The road, he explained, was very difficult to find and his driver would guide us there by the best and quickest route. He would take no refusal. On informing him that we proposed to spend the night in our car outside the town and start for Angora at dawn the next morning, he expressed great surprise at our not availing ourselves of the amenities offered by the local hotel; however, he personally accompanied us to a spot where there was a well of good water about three miles out of the town. There he insisted on posting over us two sentries whom he had brought along with him, to prevent our being disturbed by passers-by. He then left us with fresh protestations of his regret at the affair in which we had been involved.

Next morning at dawn, having dismissed the sentries, we started for Angora, with the *Vali's* car as pilot; but after fifty miles or so finding the road to be fairly well-defined we sent the pilot car back to Konia renewing our thanks to the *Vali* by the driver, and proceeded on our way alone. The route was uninteresting, consisting of long stretches over barren and dusty country varied by an occasional climb over low hills, the whole very sparsely inhabited with small cultivated areas in the vicinity of villages. We reached Angora the same evening without further incident.

Angora, the seat of Government and the heart of Mustafa Kemal's regime, is full of interest. Formerly an unknown town in the middle of Anatolia, it has sprung up, mushroom-like, almost overnight, into a modern and scientifically planned city. It was in Angora that Mustafa Kemal, driven from Stamboul after the armistice, gathered a few kindred spirits round him and planned the coup which

led to the revolution in Turkey, the defeat of the Greek Army in Anatolia, the overthrow of the Sultanate and the establishment of the new Republic. This accomplished, Mustafa Kemal chose Angora as his new Capital. He was suspicious of Stamboul with its undercurrent of political intrigue, and, determined to cut adrift from these influences, set up his seat of Government far away in Angora, the place so closely associated with the origin and accomplishment of his great ideals. Whether this decision was a wise one or not time alone will show. Certainly it has resulted in the decay of the ancient capital of Stamboul, which has sunk to the level of a neglected and second-rate Levantine port. Most of the Foreign Embassies have transferred to Angora, now the first city of the Turkish Republic. Large modern granite buildings stand in well ordered rows and the services of the most expert town-planners and architects have been secured for the lay-out of the new capital. The result gave me the impression, as we drove into the town, of some modern American city miraculously set down in the heart of an Eastern country.

Having reported at our Embassy we drove to the Angora Palace Hotel. It was an astounding contrast with the accommodation we had had up to date. Only recently completed, it is the equal of any first class hotel in London or Paris. Loud speakers provided the latest jazz music during the dinner hour. The cuisine was perfect and the service of the Swiss waiters highly efficient. Here we spent a couple of days, Major H. having business with the Embassy.

IV.

The route by which we decided to return to Stamboul lay through the *Vilayets* of Bolu and Ismet. This route which runs through Northern Anatolia is little used by ordinary traffic, the most direct road being *via* Eskishehir and Brusa. We knew that our proposed route crossed several high ranges of mountains, but we could obtain no information in Angora as to the state of the road. Nevertheless we started out full of hope refreshed by our two days' stay in the luxurious surroundings of the Angora Palace Hotel.

Shortly after leaving Angora we entered mountainous and picturesque country. The road was good and we made excellent progress, spending the night in the car by the road-side some one hundred miles from Angora. Continuing our journey early the next morning we soon found ourselves in difficult country. The road become more

and more neglected and it was apparent that it was little used by motor traffic. Numbers of ravines crossed our route all spanned by rickety wooden bridges made from the trunks of pine trees and ill-suited to the passage of anything more than a light cart. Fir trees began to appear on the rugged hills surrounding us and frequent waterfalls and streams came leaping down the mountain sides. We were not, however, destined to make much further progress that day. It was still early in the morning and we were crossing a more than usually rickety bridge which began to sway and creak in an alarming manner just as we reached the middle of it. Major H. accelerated a little to get off the bridge as quickly as possible. We reached the far end of the swaying structure and saw two yards in front of us where the bridge ended, a drop of a couple of feet on to the road. It was too late to do anything. With a horrid crash the car bounded off the bridge on to the road below and came to an immediate standstill.

We found that serious damage had been done. The gear box and clutch were smashed beyond hope of repair except in a garage. We were stranded nearly one hundred miles from the nearest railway with no immediately apparent means of getting there or anywhere else.

The first thing to be done obviously was to find some signs of human habitation, and after a short search round we found a track leading up a valley at right angles from the road. I followed this, leaving Major H. wrestling with the car in the faint hope of being able to effect some temporary repairs. After following the track for a mile or so I came upon a small hamlet built of wooden houses tucked against the mountain-side. I explained the situation to the headman and asked him if he could provide us with transport of any sort. This, he said, was impossible, but he explained that he was connected by telephone with a large village some ten miles away which was in its turn in touch with the town of Bolu, forty miles away, where he thought a motor vehicle of some sort might be obtained. It was curious to find a telephone in an out-of-the-way hamlet like this. It was, as has been said, part of the system of telephone lines which cover the interior for use by the gendarmerie in their maintenance of law and order. I asked the village headman to put a message through whereupon he explained that the only person who knew the working of the machine was the local *hoja* (priest) and that no one except him was allowed to use it. After a short delay the *hoja* turned up. When we had explained

the situation to him he started to telephone. The instrument was a primitive one and a considerable time elapsed before anything happened. Finally however, the *hoja* managed to deliver his message to be passed on to Bolu. After that there was nothing to do but wait. I returned to the car, which Major H. had found to be beyond repair and we sat down by the road-side and proceeded to pass the time as best we could.

By evening, about nine hours later, we were still waiting, further telephone calls through our friend the *hoja* having elicited no satisfactory answers. Just before dusk, as we were making up our minds to spend the night by the roadside, we spied, a party of travellers coming down the road. They were some five or six in number headed by a person apparently of some importance and mounted on a good-looking horse. On seeing us and our car by the side of the road he stopped and courteously enquired whether he could be of any assistance. We explained the situation to him, whereupon he informed us that his house was some twenty miles further on and was at our entire disposal if we could only find some means of transport to get there. He was, we gathered, a farmer on a large scale, the owner of a lot of property and a person of considerable local importance. As we were discussing ways and means over a friendly cigarette a lorry suddenly appeared round a bend in the road. It was the answer to the *hoja's* efforts on the telephone, so our luck was in once more. Our newly-found friend insisted on removing our kit into the lorry in which he said he would himself accompany us to his house where we were to be his guests for the night. The problem of Major H's car, however, remained. If we left it stranded one hundred miles from the railway what chance had he of ever seeing it again ? This problem was soon settled by our newly-found host who informed us that he would arrange for a pair of bullocks to drag the car to the railway, whence its transport to Stamboul would be a simple matter. We therefore packed ourselves and our kit into the lorry accompanied by our friend who handed his horse over to one of his retinue.

The journey which followed was distinctly unpleasant. It was by this time dark and the road had become very precipitous. Numbers of precarious-looking wooden bridges and hair-pin bends followed each other in rapid succession. The lorry driver was a most indifferent performer, the head lights were extremely bad, and we rocked and swayed over the mountain road in the most alarming fashion,

Time after time while crossing a bridge the whole structure groaned and swayed, and a crash into the ravine below seemed inevitable.

Several times we were obliged to descend and examine bridges about the safety of which our host was particularly doubtful, before the lorry could proceed gingerly across in bottom gear. He informed us that the road was practically never used by motor traffic and he was therefore unable to guarantee the bridges for such modern inventions !

Eventually, about midnight, we reached our friend's house, a large building on the outskirts of a village situated on the mountain side. Here we were treated with extreme kindness. The servants were quickly roused and the guest-room made ready. We were given most excellent Turkish dinner of *pilaf*, stewed fruit, curds and coffee, our host himself waiting on us.

Early the next morning, having thanked our host very heartily for his hospitality, we resumed our journey in the lorry, our objective being the railway station of Geyve. We had crossed the steepest ranges of hills the day before and the remainder of the journey was comparatively easy. In due course we reached the railway where we had not long to wait for a train to Stamboul. Before departing we made arrangements with the Station-master at Geyve, for the carriage of the car to Stamboul and he promised to send it on as soon as it arrived.

That same evening we reached Haider Pasha terminus on the Asiatic shores of the Bosphorus and crossed its sparkling blue waters to Stamboul in one of the excellent ferry boats that ply between Europe and Asia.

Three weeks later the car followed. Dragged by bullocks over some hundred miles of one of the worst roads in Anatolia, its condition can better be imagined than described. It was a battered wreck, almost unrecognisable from the smart-looking car in which we had set out from Stamboul a fortnight before ; while inside the seats were covered with a large and ominous brown stain, a reminder of how the ill-fated Mustafa had met his end while travelling in our company.

I have often wondered what became of the villainous looking individual who was accused of Mustafa's murder. I suspect that as soon as we had left the district he was allowed to go, having served the purpose of scape-goat for which the Police required him. It would be interesting to revisit that little village near Karaman one day and try to find out the true story of our hold-up in Anatolia.

THE BURMA MILITARY POLICE AND THE REBELLION IN THARRAWADDY.

By Captain J. F. Bowerman, 10th. Baluch Regiment.

"As regards the Military Pclice I need say no more than that if there had been sufficient reserve of strength in the force, and if they had had enough officers, they could have dealt with the rebellion themselves"— Extract from speech by W. Booth-Gravely, Esq., C.I.E., I.C.S., Special Commissioner, Rebellion, at the Burma Dinner in London on June 3rd, 1932.

Tharrawaddy was the cnly district in the rebellion area in which it was possible to collect anything like an adequate number of men of the Burma Military Police to deal with the situation. In all other parts of Lower Burma small parties of men wore themselves to shadows trying to prevent the rebellion from spreading, and in attempting to cope with a situation which became increasingly difficult from day to day.

The strength of the Burma Military Police prior to the rebellion was six frontier battalions, two garriso battalions and one reserve battalion; since the rebellion one other garrison battalion has been raised. The frontier battalion garrison posts on the frontier, and have small reserves at their headquarters to provide the columns which are sent out every cold weather. The garrison battalions have detachments all over Lower Burma whose duties are mainly to find treasury guards at district headquarters, and escorts for prisoners and treasure; at battalion headquarters they have small reserves which are allotted tasks in the local defence schemes of Rangoon and Mandalay. The reserve battalion, approximately eight hundred rifles, is the reserve for the force, and in the cold weather it supplies detachments to different frontier battalions, whose numbers have been depleted through column duties.

It can thus be seen that the end of December while well chosen to commence a rebellion from the rebel point of view, was the worst possible time, as far as the Military Police were concerned, as most of their cold weather columns had started and could not be recalled. The outbreak which occurred in Tharrawaddy District on December 24th, spread with alarming rapidity, and as the post of seventy rifles at

Tharrawaddy itself was quite unable to cope with it, additional help was demanded. A company of regular troops was sent from Mingaladon, and additional Military Police were rushed out as rapidly as possible.

As the Military Police arrived, they were split up into small parties and sent out in all directions, generally with no rations or bedding, and with no instructions except to try to restore order. No accurate information was obtainable, the wildest rumours were afloat, and the whole country-side appeared to be rising. The Military Police parties wandered about until they bumped something, fortunately in all cases with considerable losses to the people who were bumped. The heaviest casualties inflicted on the rebels were at Pashwegyaw on December 30th, where a combined force of 2/15th Punjabis and Military Police was attacked by a large body of rebels, which was only saved from almost complete annihi ation by the coming of darkness. As a rule, however, the strength of the Military Police parties rarely exceeded, twenty-five rifles under an Indian Officer, they had no automatic weapons and were on a number of occasions attacked by rebel gatherings of strengths varying between one and five hundred. At that time, too, the rebels considered themselves invulnerable and came on with a fine disregard of their own safety. The fact that they merely adopted mob tactics undoubtedly saved many a small party of Military Police.

By January 1st, 1931, four hundred and twenty Military Police of all classes had been collected in Tharrawaddy district, and two hundred mules of the Eastern Battalion had arrived from Myitkyina, but very few British Officers were available for duty in the area. However, those who could be released were sent down, and others from regular units at Mingaladon were attached to the Military Police, and it now became possible to work out a scheme to try to cope with the situation. It was apparent that it was courting disaster to send small parties of men into the blue with no definite tasks, so the policy was adopted of basing small columns on Okkan and Tharrawaddy, while a larger one of eighty rifles was given a roving commission in the villages and forest reserves bordering on the Yomas. By this time, however, the rebels had discovered that they were not invulnerable and, as it had become almost impossible to get into touch with them, a change of plan became necessary.

The new plan was based on locating detachments of regular troops in different parts of the district, with the task of patrolling

by day and night in the vicinity of their posts. The Military Police were employed in working through reserve forests and areas where it was thought that rebels might be hiding, with the idea of driving them out into the open to be dealt with by the regulars. This plan, however, proved to be a failure, as the area of country to be beaten proved very much too large to be effectively combed by the small force of Military Police, and the rebels continued to be as elusive as ever.

The method now decided on was known as the Sub-Area Scheme, and formed the basis on which operations were planned in most districts after the Military authorities took over control in July. Under this scheme all Military Police in the district were put under the command of a British Officer, the whole district was divided up into areas with boundaries allotted and these were again divided into sub-areas. Area Commanders were appointed and were made responsible for establishing posts, seeing that systematic patrolling was carried out, and that posts co-operated with those in areas outside their own. At the time of the introduction of this scheme, February 14th, it was not possible to find sufficient men to establish all the required posts, but these were gradually occupied by men from frontier battalions, who were sent down directly their columns returned to battalion headquarters.

Within five days of the commencement of this scheme a detachment of thirty rifles under a Subedar, which had reached a village named Zaingthwe, was attacked by a party of two hundred rebels. In this action the rebels made excellent use of ground and cover in their attempts to get to close quarters, but all attacks were beaten off, and on the morning following the attack, thirty-five dead bodies were found round the post; the only Military Police casualty was the Subedar who was severely wounded in the thigh.

By the end of March sufficient men had been drafted into the district to allow of all posts being occupied, and although there were only one or two minor actions, the general situation had become appreciably better; it was impossible, however, to get any reliable information about rebel movements.

Throughout April the same systematic patrolling was continued and there were a number of small encounters, two of which are worthy of mention. In the first, a patrol of nine rifles under a Lance-Naik

was ambushed by a small party of rebels, who fired one burst and then ran; one sepoy was killed and two wounded. The Lance-Naik sent back his wounded with a message to his post commander that he was following up the party which had ambushed him, and that re-inforcements should be sent out. The post commander led a party of twenty-five rifles to the scene of the ambush, and then found that the Lance-Naik was fighting a retiring action against nearly three hundred rebels whose camp he had attacked with his five men. On seeing re-inforcements arrive the rebels fled and their camp, stores and rations were destroyed.

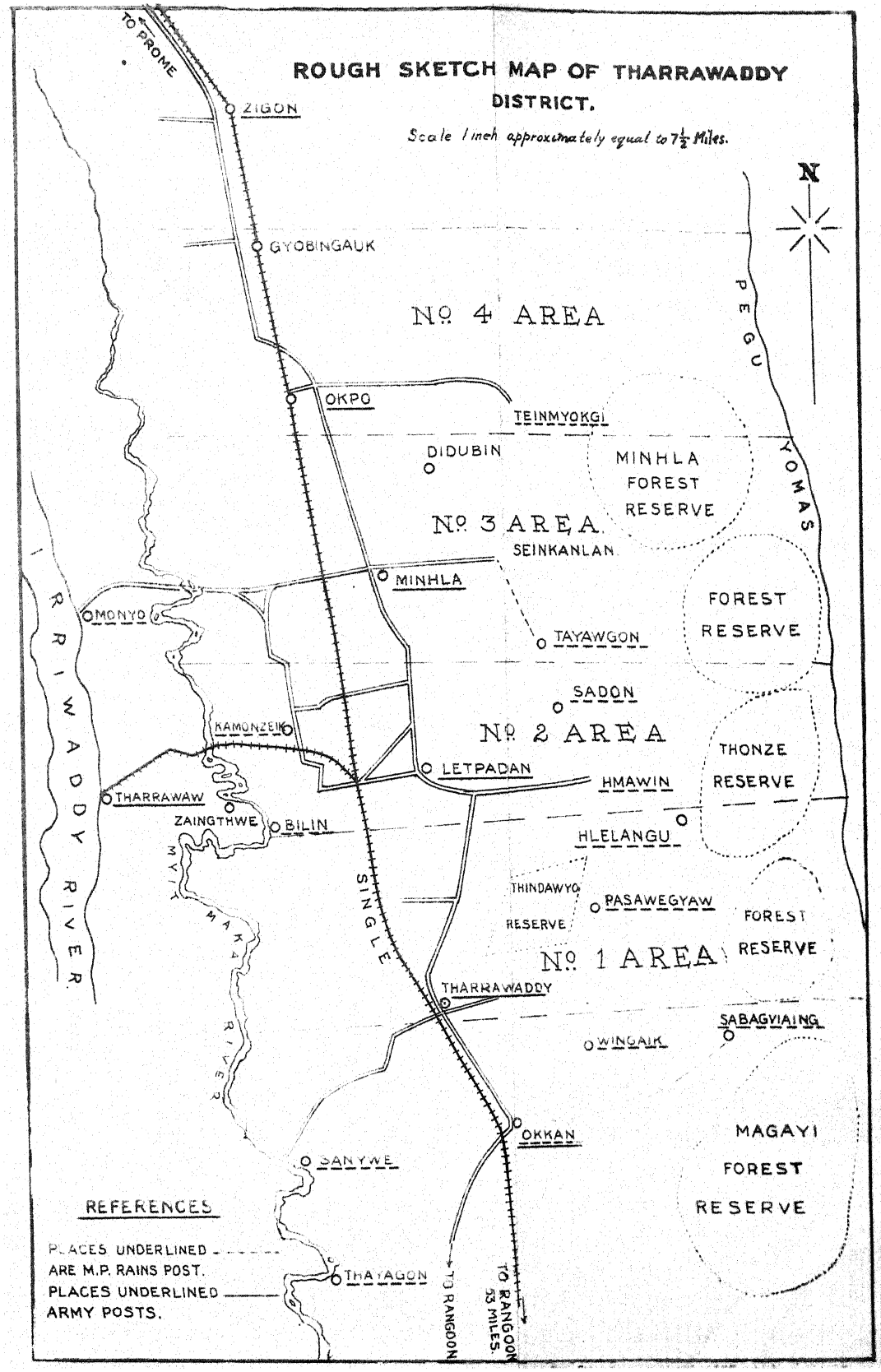
In the second, a Naik and six sepoys encountered a party of seventy-five rebels armed with eighteen guns. The sound of firing was heard by the post commander who sent out additional men to assist the Naik. In this action too the rebels bolted on seeing re-inforcements arriving, but left eleven dead and one severely wounded man on the field; eight guns were also picked up.

During May patrolling became even more intensive, and small parties of rebels were again roughly handled on several occasions. The most important engagement during this month was an attack on a camp occupied by Boh San Htu and his gang, which was carried out by twenty-three rifles under an Indian Officer. This camp was hidden in dense jungle which afforded wonderful cover for the defenders, but the attacking party captured the position with a loss of only two men wounded. The rebels lost four killed and ten wounded, eleven unwounded prisoners were taken, while the camp and all stores were destroyed.

By the end of May, although the morale of the rebels had been very considerably shaken, and the large gangs had had their numbers very much reduced by casualties and desertions, the situation was still far from normal. With the near approach of the rains, however, it was necessary once again to review the situation, as many of the Military Police posts were very isolated and it would be impossible to ration them once the rains had broken. A large proportion of the men too were badly in need of rest, as the strenuous time they had gone through had left its mark. It was, therefore, decided to reduce the numbers of Military Police from 750 rifles to approximately 300, and to hold a smaller number of posts, which for the most part were off the main road and railway line, while the regular troops were split up in small detachments at stations on the line itself.

The Military Police rains posts each consisted of a post commander and twenty rifles, and were ordered to send out patrols three times a week, to assist the Civil Police as much as possible, and to follow up any information they might obtain. As the rains drew on, this task became increasingly difficult as a considerable area of country became completely under water, but the men stuck to their work well and, considering the scanty medical supplies which were available, there was very little sickness.

By the end of the rains the situation was very much better, and the rebellion was considered to be practically over as far as this district was concerned. An out-break at Zigon was quickly nipped in the bud, and by the middle of February it was found possible to reduce the numbers of regulars and Military Police. Since then conditions have steadily improved, and everything now appears to be normal again, but small detachments of men are still stationed in different parts of the district to show that the rebellion has not been entirely forgotten.


ROUGH SKETCH MAP OF THARRAWADDY DISTRICT.
Scale 1 inch approximately equal to 7½ Miles.
N
TO PROME
ZIGON
GYOBINGAUK
No 4 AREA
PEGU YOMAS
OKPO
TEINMYOKGI
DIDUBIN
MINHLA FOREST RESERVE
No 3 AREA.
SEINKANLAN
MINHLA
FOREST RESERVE
OMONYO
TAYAWGON
SADON
No 2 AREA
KAMONZEIK
THONZE RESERVE
LETPADAN
HMAWIN
THARRAWAW
ZAINGTHWE
BILIN
HLELANGU
IRRIWADDY RIVER
MAWLAMAKA RIVER
SINGLE
THINDAWYO RESERVE
PASAWEGYAW
FOREST RESERVE
No 1 AREA
THARRAWADDY
SABAGYAING
WINGAIK
OKKAN
MAGAYI FOREST RESERVE
SANYWE
REFERENCES
PLACES UNDERLINED ARE M.P. RAINS POST.
PLACES UNDERLINED ARMY POSTS.
THAYAGON
TO RANGOON
TO RANGOON 53 MILES.



THE TRAVELS OF RISALDAR SHAHZAD MIR KHAN.

Part II.

In August 1888, I attended the "Guides Class" at the College at Roorkee. This college is the very home of promotion and advancement. There can be few who have not benefitted from instruction there. One is taught surveying, the work of an overseer, engineering, etc. Baldev Pershad, the head instructor, was a first class teacher and took no end of trouble with us, but I only passed somewhere half way down the list, for we Pathans are a thick-headed lot.

My Journey with Captain Wellby Sahib Bahadur through Chang Tang and Greater China in 1895-96.*

(See Map at end).

My fourth journey was with the famous traveller Captain Wellby Sahib *Bahadur* (Captain Montagu S. Wellby, 18th Hussars) through Chang Tang and Greater China to Peking and Tientsin.

In April 1895, I went home on two months' leave from the regiment at Nowshera. One day a camel sowar of the regiment came and couched his camel at the door of my house and told me to report myself to the Colonel at once. I mounted the camel behind him and in due course was brought up to the Commanding Officer who told me that there was a certain Captain Wellby Sahib going to China and that I was to go with him. I left Nowshera with Lieutenant Malcolm Sahib of the 93rd Argyll and Sutherland Highlanders and went to Kashmir where I met Captain Wellby. In Kashmir we bought clothes and other necessities for the journey and off we went to Laddakh. In Laddakh we bought camels, mules, ponies as transport to the value of about nine thousand rupees.

We started off along the Indus river for Shoshal which is a hill on the southern bank of the Indus ten marches to the east of Laddakh. Here we loaded up our seventy camels, mules and ponies with flour, grain and bhoosa and our journey started in real earnest.

* All the statements in this narrative have been confirmed from Captain Wellby's Book "Through Unknown Tibet, 1898".

From Shoshal village, I started sketching. We took no guide with us and relied entirely on the compass to find our way.

Chang Tang is a great plain which no one had ever thoroughly explored up to that time. The few travellers who had attempted to cross it had either died on the road or merely ventured into a corner and then come straight back. We, on the other hand, were to go right through the middle of it and were to find out all about the resources of the country, and to see if there were anything that might be of use to the Sarkar. Notwithstanding the great care we took in making preparations for the journey, we met with all sorts of difficulties from the very start and very soon the local inhabitants tried to prevent our further progress. This happened as follows :–

At the twelfth stage from Shoshal we camped by the side of the river east of Bandolah Dawan. Here we saw some savages of a tribe called the " Changpa " (people of Rudore and Rudok. Trans :), the number of whom gradually increased till there were about forty or fifty of them, and more and more came till by nightfall they had surrounded our camp.

They told us that their Chief Lama would not allow foreigners into his country. We of course paid no attention. They then threatened us with their rifles and swords, and actually threw stones at us. We got ready for a fight, but Wellby Sahib *Bahadur* said we had not come out to fight but to travel. Next morning we went back the way we had come. One of the Changpa went with us, but we gave him no fire to warm himself nor water to drink, so he soon got fed up and returned. We then gave up hope of travelling by that road and chose one more to the North over the Lanak La which they told us eventually led to the East. It was a dreary lonely track, and for seven months we saw no signs of human habitation.

A Shooting Accident.

One day Captain Wellby Sahib had gone out shooting small game. On his return he gave his gun, which he thought was empty, to his servant to carry. One barrel, however, was still loaded. One of our servants called Lassu tried to snatch it away from Esho (a Laddakhi servant) on whose left a mule driver, Sadiq by name, (called Sulloo in Captain Wellby's book) was walking. Esho whilst struggling with the gun cocked it, pressed the trigger, and let it off; and the whole charge of shot hit Sadiq in the face and smashed his lower jaw. He collapsed

on the ground groaning. We had no appliances on the spot—not even any tea to give him—nothing. So I put him on my mule and we took him along like that. In camp we fed him on bread sopped in tea. The situation was serious for he was in too great pain to move and implored to be left where he was to die. Captain Wellby pointed out that supplies were running short, and it was impossible to tell how long the journey was going to take, and that the whole party could not be held up for Sadiq. We left one man and one pony with him and went on. The first night—a long time after we had got into camp, the pony led by its driver, and carrying its huddled burden straggled into camp. We never saw them again—though for many evenings we strained our eyes to catch sight of them. They must have died for there was no sign of human habitation within at least four months' journey of where we left them.

Now our troubles began, for the road was deep in snow and the mules could get nothing to eat. After a week or so of such conditions one of the ponies died. The Sahib then decided to feed the animals on bread. As a result of this our own rations came to an end in a very short time. We then had to rely on our guns for food.

*Wild Horses.**

We saw great herds of wild horses, which career about in long lines and look like a Brigade of Cavalry drilling. They are small and chestnut coloured. They had never seen a man before, and would come right up close to look at us, and then run away for a mile or so and come up again.

One evening on getting into camp we shot one of these horses for food, but its meat was very unwholesome. It gave me the most dreadful stomach ache. The Captain Sahib gave me some medicine, but it did me no good and I could not keep up on the march next day. At nightfall there was a heavy fall of snow, and in a short while the whole country was covered as with a white sheet. I made myself vomit, after which I felt a little better. I then fell head over heels into a snow drift and lay there unable to move. When dawn broke I staggered on, but the snow had obliterated all signs of the road. How-

* The Kyang or wild ass of Tibet and Laddakh usually stands about 14 hands; he is of a light brown colour, with white throat, belly and legs; rather heavy in neck and shoulders, he is nevertheless a graceful mover and there are few prettier sights than a herd of them scampering over the wide plain. (Through Unknown Tibet—Wellby.)

ever I started off in the general direction of our journey and soon met some men the sahib had sent to look for me. They helped me into camp. They gave me some hot soup of sorts which was all we had. After the meal we started off again.

Yaqs.

We now got to a part of the country where the Yaq, which is a sort of snow ox, abounds. The Yaq has long hair reaching nearly to the ground. I have never seen any other wild herbiferous animal so fat. There must be quite 30 lbs. of meat in one haunch.

One day a couple of these animals, a male and female, were going along in front of us, when all of a sudden the male turned and charged us. I could not shoot it as my rifle was in its canvas case, but I brandished it at the animal and he shied off and ran away.

The Servants Desert Us.

When the followers saw that our rations had come to an end they refused to obey orders, and objected, they said, to eating the flesh of wild animals. Twelve of our mules died and we had to leave the least important loads by the road side.

The experience I gained from this journey was that so long as you have even one Sahib with you, you will never die of hunger. For they have with them all the necessary implements for shikar ; double barrel guns, fishing rods, tackle, etc., etc.

When we could not get game, we used to eat wild onions which we found by the side of the road and collected in the spare nose bags of the animals that had died. Firewood was practically unobtainable.

One day, when a servant called Juma was watering his mule, he let it down into some filthy water which it proceeded to drink. The Sahib asked him if he was mad to let the mule drink such filthy stuff. Whereupon all the followers began to insult the Sahib and to shout at him. The Sahib Bahadur then kicked Juma hard, after which all the followers, including the Sahib's personal servants, packed up their belongings, and taking the Sahib's pistol which was in their keeping, left us and ran away back the way we had come.

The Sahib managed to persuade Lassu and Esho to stay with us. The other ten wandered about for several days, but as they found nothing to eat they came back and followed in our tracks for two or three days.

They obviously intended to murder us and take our stuff, so we took all possible precautions by day and night. One day they came up very close and shouted out that they were ready to obey our orders. We decided to take back one of them—Shukar Ali, and sent the others away. They were a constant source of danger to us for they were so many and we were so few.

One day our camp was by the side of a nullah to the east of which was a small hill. From the west we saw the mutinous servants coming along the nullah towards us. Wellby Sahib told me to have a shot at them with my rifle. Instead of this I drew out my long knife and went up the nullah towards them. The two Sahibs followed me up in support. As soon as the servants saw us they retreated precipitately. I tried hard to catch them up, but they got away in the jungle and right out of sight. We never saw them again, and heaven only knows what happened to them. They probably died, as there was no sort of human habitation within hundreds of miles.

The Mules Die.

We continued our march through country, the average height of which was 16,000 feet above sea level and where for several days our twelve mules got nothing to eat whatsoever. At length we came to a patch of vegetation at the foot of a hill and there we camped.

The unfortunate mules grazed till night fall. Then we rounded them up and picketed them, and went off to sleep. At about ten o'clock I saw the mules lying down as if they were dead and reported the matter to the Sahib. He came along with me to the mule lines and caught hold of a mule's head and I of its tail, and we tried to lift it on to its feet; but it collapsed on the ground again. To cut a long story short, eight of them died that night; one was dreadfully ill and died shortly afterwards. Of all our transport animals, only three mules remained. Before this, we had thrown away some of the loads, but that day we had to drop eighteen loads of clothes, uniforms, etc., and to leave the tents standing where they were. We left some very fine coats, poshtins, etc., including all the Sahibs' writing materials. It seems that Europeans find it very uncomfortable to sit down without a chair; for the Sahib threw away everything that he had, but carried his camp chair on his shoulder. I cut up the tripod of my plane-table for fire-wood. I took with me one blanket and the suit of clothes and Kashmiri sandals that I stood up in. The Arabs say that

"Travelling is Hell," and verily it is so. Wellby Sahib now said that from the theodolite it appeared that China was quite close, but the theodolite turned out to be wrong.

At last our clothes got completely worn out and threadbare. From continually wading through water, the skin of my feet had chapped and cracked and they were black with dirt, for we had no soap. We only had snow water to wash in, and after our journey it took us nearly a year to get clean for the dirt had eaten right into our skin.

Signs of Life.

We now began to see some signs of human habitation. After six months' march, one day we saw some sort of Buddhist inscription on a stone. Some ten days after this, we found some broken pieces of china tea cups and saucers by the edge of a pool, and this cheered us up tremendously. One morning after a heavy snow fall we had marched about four miles when Esho, the bearer, drew our attention to something black at the foot of the hill in front. The Sahib looked at it through his field glasses and said it was a black camel-hair tent. Esho went forward to investigate and came back and told us that it belonged to a merchant from Lhassa who was taking a thousand yaqs to China. We decided to go with him and caught him up next day. From him we found that China was more to the north and that if we had not met him we would have had yet another six months' journey in the desert; for we had been making for the sea, due east.

I had suffered a great deal from hunger, and now saw a chance of eating my fill. The merchant, however, refused to sell us food except at famine prices and the Sahib decided that the best thing we could do was to leave him and to push on ahead.

We bought a pony off him to supplement our three worn out mules. When we told him of our intention to push ahead, he warned us that we would lose the way and would again have to eat the flesh of dead animals in the wilderness. However, we managed to find out all about the road from the drivers in his caravan, and then we left him. Eventually our supplies came to an end, and the merchant's words came true.

One day Wellby Sahib shot a black bear which was very fat. We had a lot of difficulty in cooking it, as we had thrown away our cooking pots and the followers only had one each. I did not like the idea

of eating bear, but there was nothing for it, so we washed the flesh as well as we could and roasted it. From the very beginning I had told the Sahib that I was ready to eat anything that he thought was all right, but I did draw the line at big fat rats and bears.

We had been travelling at 16,000 feet when we suddently had to come down to 8,000 feet. Here Captain Wellby Sahib found some black-berries and called out to us, "Hurrah ! here is the fruit of China !

We were delighted.

A little further on we saw some houses, and later, when we saw more signs of life, the Captain Sahib told me to go ahead and reconnoitre. I went as far as I could, but saw no one and came back. That evening the Sahibs themselves went out and discovered that the local inhabitants were shepherds. We met some of them next day and they gave us some mutton to eat. We were now sure that we had really reached a civilized country where we should be able to get food and transport to relieve our exhausted mules.

On the 14th October we got to the city of Tonkar where we met a Swedish missionary, Mr. Rijnhart, by name. He had lived there for many years with his wife. He borrowed 200 dollars for us from the local Chinese officials. Thirty miles further on we came to Sining where we found a Doctor Ridley Sahib, who managed to procure a buggy for us.

The Hinterland of China.

The people look on all foreigners with the greatest contempt, and, as they all wear clothes of exactly the same pattern and colour, any foreigner is immediately recognisable. Even the Muhammadans wear little caps on their heads and pigtails down to their heels. The Buddhists and Christians wear long coats and trousers and sandals on their feet. The Chinese never cut their nails, which grow to an enormous length.

The currency consists of brass coins with holes in them which they thread on a string. About 250 of such coins go to a rupee. They also have a silver coin which they call a "Yambu" which is commonly used for exchange. Japanese dollars are also current, and Japanese matches and goods are sold everywhere.

One day I gave two men a rupee, telling them to take half each. One of them drew his sword and cut the rupee in half. I asked him why he had spoilt the coin. "Oh we always do that" he replied.

There are caravansarais at every stage, and everyone one meets in these, is just like the Persians rotten from drink and opium.

All Chinese women are lame and they are only able to limp for a short distance. When a girl is born, her feet are tightly bandaged up, so that even when she is full grown her feet remain like those of a baby. If a woman's feet are not so deformed, she is not considered fit to be married. I have seen the dhoolies in which they take the bride along to her wedding. She is seated in a sort of chair and is veiled, but any passer-by may ask the bearers to let him see the bride's face and they will put the dhooly down and she will unveil !

When a Chinaman dies, he is buried in the fields and all trace of his grave is soon lost in the cultivation.

On the 4th November 1896, we got to Chang Wei on the river Hoang Ho, where we embarked on a ship, and sailed for the city of Shabtiz, where one can see the Great Wall of China on a hill to the East. This wall is 1,600 miles long. For 450 miles between Shabtiz and Butan we followed the line of the wall. The wall is wide enough for a field gun to go along it.

The country is densely populated ; the villages are about a mile apart and every five or six miles you will find a town of considerable size. The road we followed ran through these settlements.

You can take it from me that all the idol worshippers in the world are concentrated in Tibet and China. In each and every street and lane in a Chinese town, there is an idol temple. Some of the idols are of gold, some of silver and others of brass. They are all placed in a row. At the gate of the temple there is usually a stone lion or some such thing. There are no metalled roads in China and carts merely follow each others tracks. Carts usually have two horses which are driven tandem. There were six of us and we hired three carts, in one of which Captain Wellby and I sat. One night we started at 10 o'clock and I asked the Sahib to let me walk for a little. We soon came to a stream which delayed me for some time, but the cart went on. It was pitch dark and I soon got lost. The road ahead split into two and I took the one to the left. At dawn, I came to a large hill on the side of which I saw a Chinaman. I had picked up enough Chinese to ask for what I wanted and to find the way, so I called out to him, "*Talu Pekin* ? " which means, " Where is the road to Pekin ? " He pointed to the other side of the hill and said," Down there." I found

that I had come a long way out of my way and could see nothing of the Sahibs. On I went. I was wearing a torn old fur cap, my breeches and coat were in tatters and my Kashmiri sandals in ribbons. I could not get rid of the people I met who followed along behind thinking I was a mad faqir. They jeered and hooted at me.

I met one good fellow who gave me an egg and a cup of tea. He refused to take any payment. On the morning of the third day I met the Sahibs in a caravansarai, but I felt very aggrieved that they had neither taken the trouble to wait for me nor had made any effort to search for me.

Pekin.

To the west of Pekin runs the same Great Wall, and here the road crosses the wall. At such points there are towers and the road splits up into three alley-ways and passes under the towers through tunnels. The road joins up again on the other side. There is a bridge to the west of Pekin which is built of stones of amazing length.

The road we had followed from Laddakh to Pekin was about 3,000 miles.

Pekin is a fine city which we entered by the Western Gate. We saw in front of us a fort, which we entered to find another fort, and inside that yet another and so on, the gates being all opposite one another. It is a very large and beautiful city, the shops are splendid and are decorated with coloured boards outside. One day I saw some Chinese soldiers in the bazar with banners in their hands marching along both sides of the road, and I heard that the King's daughter was coming along in a dhooly. A band was playing, but I must say that Chinese music did not appeal to me. It sounded like a lot of donkeys braying. I believe that the Chinese army has now improved a lot, but in those days their uniform was all in tatters and looked just like a faqir's blanket! Their rifles were mostly Russian single-loaders. There was nothing like discipline. When soldiers were walking along the street, they would often practise shooting at a stone. Officers were recognisable by a feather in their caps. No one pays any attention to the King's orders. The people do just what they damn well like and nothing else. There was a British Agent in Pekin, who did all he could to help us.

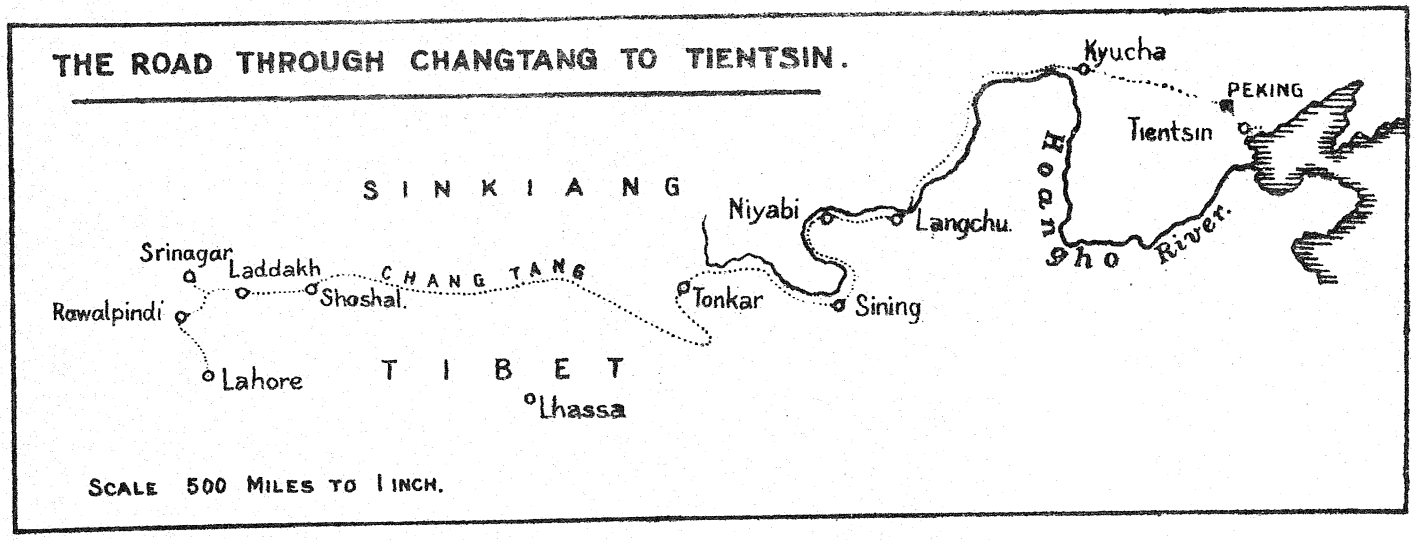
It is 100 miles from Pekin to Tientsin. In those days there were eighteen Sikh sepoys in Tientsin who acted as military police. They

got 18 dollars a month with rations, uniform, etc. In Tientsin, one finds ships from every country in the world. I saw a Japanese man-of-war in the harbour. The sailors seemed a very fine lot. Here we embarked in a ship and went to Hong Kong which we reached in seven days. Hong Kong is a lovely city and is built on a small island.

In seven days' time we reached Singapore. As I had no clothes fit to wear, I bought myself here a suit of clothes and some bedding. I then tied my old stuff into a bundle and threw it over board. Some onlookers asked me what I was doing and I replied "Thus have I destroyed the stronghold of the lice!" In due course we reached Calcutta *via* Penang and the Andamans.

Here I bade farewell to Captain Wellby. The Sahib *bahadur* went to Lucknow, and I rejoined the regiment in Nowshera. Some time after he sent me two hundred rupees and recommended me to the Quarter Master General in India for the MacGregor Medal which I was given with a reward of Rs. 150/-.

(To be continued.)


THE ROAD THROUGH CHANGTANG TO TIENTSIN.
Kyucha
PEKING
Tientsin
SINKIANG
Niyabi
Langchu.
Hoang Ho River.
Srinagar
Laddakh
CHANG TANG
Shoshal.
Rawalpindi
Tonkar
Sining
Lahore
TIBET
Lhassa
SCALE 500 MILES TO 1 INCH.



THE AMERICAN CIVIL WAR, 1861-62.

By Longtimber.

Some Short Notes on the Shenandoah Valley Campaign.

Policy and Strategy.—A Government has a right of control over its servants but Lincoln did much to ruin McClellan's plan, his action was ill-advised and defeated its own ends.

In framing a plan of campaign the commander must consider the susceptibilities of his Government. McClellan's plan to move by sea to Fort Munroe would have compelled the *Confederates* to conform and concentrate for the defence of Richmond, but he did not take the trouble to convince his Government of this; he also miscalculated the time required. Lincoln, however, realised this.

The battle of *Kernstown* (March 23rd '62) realised Lincoln's fears and upset McClellan's plan. Once political fears are roused, Governments will exercise their right of control.

Government control was just as severe on the *Confederate* side. But Lee acknowledged this right of control and was loyal to it.

Lee's policy was to let the enemy advance into difficult country where they could not profit by their numbers.

Each side had three ideas :—

1. To take the enemy's Capital.
2. To defend its own Capital.
3. To defeat the enemy forces.

Note the abnormal value attached to Capitals.

Strategy was disregarded because Public opinion :—

1. Does not understand concentration but only dispersion.
2. Fails to grasp time and space conditions.
3. Favours detachments.

At the commencement of hostilities tactics were Crimean in nature but soon altered to suit new conditions.

Topography.—Roads in Virginia few and bad. Natural obstacles very great. Eastern Virginia thickly wooded. Rivers very large, bridges few and far between, a few fords. The use of rivers by the *Federals* contributed largely to their ultimate success.

The *Shenandoah* Valley 20 to 25 miles across and 140 miles long, well cultivated with few fences. The valley of the *South Fork* narrower and more wooded than that of the *North Fork*. A number of vitally important gaps existed in the *Blue Ridge*. Note the salient frontier of the *Confederate* country.

1861 *War.*—In April 1861, the attack on Fort *Sumter* opened the war. Little of importance occurred, however, till the battle of *Bull Run* on 21st July 1861.

Dispositions. McDowell (F), 50,000 about Washington.

Beauregard (C), 20,000 at Manassas Junction.

Near Harpers Ferry, Patterson (F) with 14,000 was confronted by J. E. Johnston (C). with 11,000.

The *Confederates* succeed in debouching from the Valley. Afterwards, however, Jackson would have liked to advance, but halts at Winchester.

The *Federals* awake at last to their difficulties. McClellan assumed command, he held the confidence of the troops under him.

Jackson wished to take the offensive after Bull Run but Jefferson Davis would not weaken certain places in the south in order to provide the necessary troops. Abandoning territory a constant fear.

McClellan wanted time to organise his forces and undoubtedly got it as the *Confederates* made no move. By refusing to advance McClellan forfeited the confidence of his Government with disastrous future results.

Jackson on the other hand, always considered how his movement would assist Lee and hamper McClellan.

The Federals had three main lines of advance against Richmond.

(*a*) Via the Shenandoah Valley.

(*b*) Via Alexandria-Manassas Junction—Culpepper and Gordonsville.

(*c*) Via Aquia Creek—Fredericksburg and Hanover Court House.

Outline of events up to the commencement of 1862.

1. Battle of Bull Run 21st July 1861.
2. McClellan re-organises the *Federal* troops.
3. *Confederate* leaders anxious to assume the offensive.
4. Jackson in command in the Valley.
5. The expedition to Romney 13th January 1862.

Situation, February 1862.

Federals.

200,000 round Washington under McClellan.

20,000 in the Alleghanies under Fremont ($\frac{1}{2}$ at Petersburg near Moorfield and $\frac{1}{2}$ 100 miles west of Staunton).

38,000 under Banks north of Winchester.

Fort Munroe was held by the *Federals.*

In all approximately 260,000 men.

Confederates.

32,000 at Centreville under J. E. Johnston with a detachment at Leesburg.

4,600 under Jackson at Winchester.

A force under Magruder near Yorktown.

A force holding Norfolk.

McClellan's plan of campaign.

The people of the North favoured a direct advance upon Richmond which would cover Washington and lead to a decisive battle.

McClellan, however, overestimated the *Confederate* strength, was deterred by the natural obstacles presented by rivers, forests and bad roads and also by the difficulties of supply up to Fredericksburg.

He proposed to overcome these difficulties by turning the *Confederate* right and using the York and James rivers to feed his men.

He calculated that the *Confederates* would hurry down to Richmond. Time and space were against him.

Jackson, from his position at Winchester, threatened western Virginia and Maryland and cut the communications by the Baltimore and Ohio railway and could menace Washington. In addition he could reinforce troops at Centreville.

Jackson's reputation was beginning to cause alarm in the breasts of the *Federal* leaders.

Both Lee and Jackson early recognised how vulnerable Washington was politically and as a junction of communications.

McClellan's original plan to land at Urbanna was vetoed by the Government who suggested that he could either (*a*) go to Fort Munroe or (*b*) advance overland. He chose (*a*). He was instructed to leave sufficient force for the defence of Washington. His plan was right in principle but wrong in detail. It required early success and

would be defeated by serious delay. An overseas expedition with untrained troops is more difficult than a direct advance especially when the hostile positions are known. His movement was on exterior lines leaving Washington uncovered. He therefore had to bear at once upon the enemy's main army and never relax.

Diary of events from 7th till 23rd March 1862.

March 7th—9th. *Confederates* fall back on Richmond. Jackson isolated in the Valley—3,600 Infantry, 600 Cavalry and 27 guns. Jackson's orders were to keep the enemy employed without exposing himself to defeat, in order to prevent them from reinforcing their main army.

7th. Hill retires from Leesburg.

9th. J. E. Johnston retires. This coincides with the *Federal* advance towards Centreville but was not caused by it. Banks ordered to occupy Winchester. His force divided into three Divisions of average strength 12,500.

11th. *Confederate* "Council of War" resulting in Jackson's retirement from Winchester. This caused McClellan to order Williams to Manassas, Sedgwick to join main army and Shields to remain to look after Jackson.

12th. Banks occupies Winchester and Jackson, Strasburg. Banks estimates Jackson's force at 11,000 men.

18th. Shields is pushed on from Winchester to Strasburg.
Jackson falls back to Mount Jackson.
His real strength is ascertained by Banks.

20th. Sedgwick, Williams and Banks ordered to move on Manassas. Shields to continue to watch Jackson and protect the Baltimore railway.

21st. Jackson learns that Shields is retiring. He decides to attack.

22nd. Ashby's cavalry get into touch with Shields, south of Winchester.

23rd. Jackson, after two marches of 14 and 21 miles, decides to halt. He finds his camp overlooked by the enemy. Bad staff work. This brought on the battle of *Kernstown*.

To realise the strategic result of this battle the general situation must be borne in mind.

General Situation.

A portion of the main *Federal* army had begun to land at Fort Munroe on 19th March ; but on 23rd March this was unknown to the *Confederates.*

Remainder of *Federal* main force had advanced to Centreville with cavalry on line of the Rapidan. *Confederates* had fallen back.

Banks' force—Williams to join main army *via* Snickers Gap. Shields to Winchester, Sedgwick to the west.

On 23rd March, Ashby's cavalry had a skirmish with the *Federals* and located 4 regiments of infantry, some guns and cavalry.

Jackson on coming up decided, at first, not to attack, then changed his mind thinking that he had a *rear guard* in front of him and correctly attacked. It was lucky for him that he had not attacked earlier since his movements were all exposed to his enemy.

The *Federals* did not profit by their opportunities. They had a weak holding attack in front and might have got through, but Jackson's boldness imposed on them. Jackson in this battle attacked at the start with 3 regiments ; this did not deceive the *Federals* who had 8 battalions opposed to him and sent away 6 to reinforce the decisive point.

Information.

The importance of early tactical information is brought out in this fight. In this case Jackson thought that he was in front of an inferior force though actually out-numbered by 3 to 1.

Would he have been justified in attacking, if he had been aware of the real facts.

The Battle.

Federals.—Tyler's brigade north of Winchester.
Kimble with 5 battalions behind Pritchards Hill.
Sullivan's brigade supporting Kimble, concealed from Ashby.

Confederates.—Stonewall brigade (Garnett) 5 battalions.
Hookhan's brigade 2 battalions.
Burke's brigade 4 battalions.
Ashby's cavalry and 3 horse-guns (280 men).

At the commencement of the fight 4 out of 5 batteries had been left south of Kernstown.

Jackson quickly saw that the occupation of the " Sandy Ridge " would cause the *Federal* rear guard to fall back to save their communi-

cations with Winchester. In about 20 minutes he had seized the ridge but came under heavy artillery fire from his right flank.

Jackson's containing attack had soon been reduced to a few men under Ashby, one battalion of Burke's brigade and the 48th Virginia Regiment.

On reaching the sandy ridge, Jackson had deployed into two lines and occupied a small stone wall. He had no reserve. His guns could only engage those on Pritchards Hill and were unable to keep down the hostile infantry fire.

By this time Tyler's brigade was attacking Jackson from the Toll Gate and Kimble had not been deceived by the containing attack.

As the situation appeared to be getting desperate, Garnett (without orders) sent back the Stonewall brigade to take up a position to cover the *Confederate* retirement. Jackson quickly realised that there was only just time to get the troops away. The *Confederates* retired to Newtown unmolested; a portion of Ashby's cavalry covered the retirement.

Note the difficulty of pursuit, almost always so in history.

Effect of the Battle.

The effect of this battle upon the *Federal* Government was far-reaching:—

1. Williams' Division (8,000 men) recalled from Manassas to Winchester.
2. Shields' command tied to the Winchester area.
3. Federal Government's attention drawn to Jackson's force and the Upper Potomac.
4. Blenker's Division (9,000 men) withdrawn from McClellan and ordered to Western Virginia.
5. Becoming concerned for the defence of Washington, Lincoln order the 1st Army Corps, 37,000 strong, under McDowell, to remain at Manassas instead of embarking for the Peninsula, thus McClellan's force of 150,000 men for the advance on Richmond was reduced by 46,000.
6. McDowell given an independent command covering the approaches to Washington.
7. Banks also withdrawn from McClellan and ordered to defend the Valley.

McClellan on the eve of his advance upon Richmond thus found himself considerably weakened and embarrassed by Lincoln's action.

Tactical Notes on Kernstown.

Jackson's tactics based on sound principles. His flank movement risky, but he believed his information reliable. His manner of execution was in accord with the principle of co-operation of all arms. He was, however, ultimately unable to use his artillery for the support of his infantry. His cavalry co-operated on both flanks.

If the *Federals* had pushed on they could have rolled up the *Confederate* right flank and compelled Jackson to get away across country.

Jackson did not consider the day lost as long as he had an untouched reserve. But for Garnett's order to retire, Jackson said he would have won the battle. There was confusion as to who was in command of the flank attack ; Jackson did not make this point clear. Therefore question for consideration—" the position of a commander in battle ? " Very important from point of view of staff, especially now with complicated system of command.

Use of cavalry. In attack or defence, keep the mass of cavalry on one flank, but have some on the other. The *Confederate* cavalry, though few in numbers, was used to protect *both* flanks. Out of 600 *Confederate* cavalry only 280 were actually present in action. It was owing to the action of Ashby and his cavalry that the *Federals* did not pursue Jackson after the battle.

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Following on the results of Kernstown, the *Federal* forces were divided into 4 armies under :—

(*a*) McClellan. (*b*) McDowell. (*c*) Banks. (*d*) Fremont.

All controlled from Washington.

Banks now halted 6 days at Strasburg.

Note the importance of the Massanuttons (50 miles long) as an obstacle, passable only by the road Newmarket—Luray.

Diary.—On April 2nd. Banks at Woodstock with cavalry 5 miles south of Edenburg. Jackson fell back slowly to Rudes Hill, $2\frac{1}{2}$ miles south of Mt. Jackson.

Ashby in touch with *Federals*. Jackson's force increased to 6,000.

April 5th. McClellan advanced up the Peninsula. His 60,000 men checked by 15,000 under Magruder for 5 days.

Ashby with 1 Sec. guns and 1 infantry brigade seperated from Jackson in order to check Banks at Edenburg.

He succeeds in holding Banks back for 14 days.

April 10th *Confederates* commenced to retire.

General Situation on 16th April 1862.

Confederates.	Main Army.	50,000	Johnston	Yorktown Peninsula.
		10,000	Anderson	Fredericksburg.
	Left Flank.	8,000	Ewell	Culpepper.
		6,000	Jackson	Rudes Hill.
		3,000	E. Johnston	McDowell.
Federals.		100,000	McClellan	Peninsula.
		37,000	McDowell	Fredericksburg.
		20,000		South of Washington.
		7,000		Warrenton.
		19,000	Banks	Woodstock.
		20,000	Fremont	Moorfield.
		9,000	Blenker	Harpers Ferry.

The *Confederate* front was 150 miles long, the *Federal* 220 miles.

The *Confederates* were on "Interior" lines with minimum of detachments. The *Federals* were on "Exterior" lines and held the initiative; the *Confederates* could do nothing but wait for a false move.

Jackson's Tasks.

(1) To contain *Federals.*

(2) Prevent them occupying the Valley and capturing Staunton.

(3) To be in a position to move to Richmond at any moment.

April 17th. Jackson at Harrisonburg. The importance of Staunton, *i.e.*, Supply depot—road junction—railway and strategical point.

Jackson prepares an alternative base at Gordonsville.

Courses open to Jackson.

(1) Wait at Harrisonburg and call up Ewell.

(2) Remain at Harrisonburg and order Ewell to act on Banks' communications.

(3) Retire on Staunton, between Fremont and Banks, but Valley south of Harrisonburg open and unsuitable to Jackson's small force.

(4) Join main army.

(5) Collect at Fisher's Gap.

(6) Move to Elk Run Valley, recalling Ewell to him, from here he could cover his own communications and threaten those of Banks better than from Harrisonburg. He was also safe from Fremont in the Alleghanies.

He decides to move to Elk Run Valley.

Consider his strategic position there and his appreciation of the situation.

Banks moves slowly forward towards Staunton with cavalry to Harrisonburg. E. Johnston pushed back to within 7 miles of Staunton.

Blenker sent to join Fremont and *Confederates* learn that McDowell is concentrating at Fredericksburg.

Jackson therefore submits 3 proposals to Lee.

1. Combine with Ewell and move by Luray Gap against Banks.
2. Combine with E. Johnston against Milroy at McDowell, and then deal with Banks.
3. Move *via* Front Royal against Banks.

Lee leaves the choice to Jackson and he selects the 2nd plan.

Possible ways of moving.

1. By Harrisonburg.
2. By Port—Republic—Cross Keys—Staunton.
3. Up the eastern side of the Shenandoah, across Blue Ridge by Brown's Gap to Mechums River Station.

He chose the third route and 8 days after his march started the *Federals* knew nothing about it.

Situation during May 1862.

May 3rd and 4th. *Confederates* evacuated Yorktown Peninsula.

5th. Rear-guard action at Williamsburg.
Federals occupied West Point.

10th. *Confederates* evacuated Norfok. Huger burnt his stores and fell back.

11*th*. Merrimac blown up.

Federals making arrangements to reinforce McDowell with Shields' division.

Anderson (12,000) near Fredericksburg facing McDowell.

Johnston falling back before McClellan.

Fremont strung out all along the Valley.

Banks falling back on Newmarket. Milroy at McDowell.

Fremont between Franklin and Romney. Jackson at Staunton.

E. Johnston at West View 7 miles west of Staunton.

Ewell at Swift Run Gap.

Note the doubt amongst the *Federal* leaders as to Jackson's intentions. Jackson thought that Milroy's force was the smaller and that it should, therefore, be attacked.

Situation in the Valley.

May 6*th*. E. Johnston moves a short distance and Jackson follows him from Staunton.

8*th*. E. Johnston halted 8 miles east of McDowell. The road to McDowell crossed Bull Pasture Run, a considerable obstacle but not unfordable.

Note Milroy's position at McDowell.

Jackson decides to hold Sitlington Hill and turn the *Federal* left during the night. But at 3 p.m. Milroy decides to attack to gain time to get away. The Offensive-Defensive.

Note moral effect of Milroy's attack :—

1. Jackson's plans frustrated.
2. Jackson surprised. It was an encounter battle.

The Battle.

May 8th. Five *Federal* battalions attacked.

E. Johnston had 6 battalions on Sitlington Hill, he was afterwards reinforced by the "Stonewall" brigade.

At about 6 p.m., *Federals* began to retire.

Federal guns had no targets—*Confederates* had no guns.

Confederates did not pursue. Was this owing to the difficulty of the country ?—or paucity of troops ?—or both factors ?

The *Federals* drew off towards Franklin.

Point for consideration—Milroy might have occupied Sitlington Hill originally and attacked the head of Jackson's column emerging from the Bull Pasture Mountain defile.

9th & *10th*. Jackson follows Milroy.

11th. Milroy at Franklin.

Note Jackson's foresight, after the battle, in sending cavalry to close roads entering the Valley from the west. In one case felling trees across the road on both sides for over a mile. A good after result when Jackson was withdrawing down the Valley.

12th. Jackson decides to return to the Valley as he might be required at Richmond at any moment.

May 17th. Jackson reaches Mount Solon, having separated Fremont from Banks.

Lee's Plan of Campaign.

The offensive-defensive. He decides to attack Lincoln in Washington and *not* McClellan near Richmond.

Lee wished to leave Johnston and Anderson where they were, attack Banks in the Valley and *thus* Lincoln and Washington.

Johnston appreciates the situation. He wished to concentrate at once and attack all forces in his front.

On 1st June *Lee assumes command* of the *Confederate* forces in the field.

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Jackson in the Valley.

May 19th. Jackson at Mt. Solon. His force 17,000 men in 2 divisions, consisting of 48 guns, 3 regiments of cavalry, and 13,000 infantry.

He advances against Banks.

Note the position of Banks. It is always dangerous to operate from an insecure base. Note the position of the Massanuttons. His force was divided thus :—

At Strasburg, 3,000 cavalry, 15 guns, 4,000 infantry.

At Buckton, 1,000 infantry and the remainder about Front Royal.

Jackson reaches Newmarket. Ashby's cavalry held the fork of the roads from Luray and Newmarket, thus Banks never knew from which direction to expect attack.

Note Jacksons manœuvre in the nature of a raid and his method of approach against Front Royal.

He could always fall back by Staunton or Gordonsville.

From Newmarket he crossed the Massanuttons to Luray.

May 23rd. Approaching Front Royal Jackson left the pike about 3½ miles south of that place and moved towards the Front Royal *Federals* by an unwatched rough track. Kenley at Front Royal had no cavalry for reconnaissance.

Action at Front Royal 23rd May 1862.

Remarkable result of charge of 250 *Confederate* cavalry.

Jackson's reasons for attacking Kenley (weaker force) rather than Banks.

Contrary to the method of holding weaker force, Jackson thought that:—

1. He could annihilate Kenley.
2. He would be in a better position to attack from Front Royal than from the south.

Appreciation of the characteristics of the hostile Generals.

Jackson wished his enemies to think that he was moving in force up the North Fork, whereas he sent Ashby that way and slipped off from Newmarket across the Massanuttons.

Note his method of surprise and rapidity. He organised a "Corps of Orderlies." Wellington organised a similar Corps.

It was not till about 4-30 p.m. that Banks heard of the defeat of Kenley and not till 10 a.m. next day (24th) that he realised his danger.

Jackson was in doubt as to Banks' line of retreat from Strasburg. *There were 3 courses of action open to Banks.*

(*a*) He could move west towards Fremont's force near Moorfield and Franklin.

(*b*) Move east through Front Royal and Chester Gap towards Geary's small force.

(*c*) Hold on at Strasburg and wait for reinforcements from Winchester.

Jackson thought that he would adopt course (*b*), but Banks elected to fall back on Winchester. Had Jackson gone straight for Winchester he could have got there first. But then Banks by adopting (*b*) could have saved himself.

Action of Jackson.

He sent half Ashby's cavalry by the Front Royal-Strasburg road. Half to Cedarville and Middletown.

Ewell moved to Nineveh with his cavalry to Newtown.

Jackson did not want to let go of Cedarville before he definitely knew Banks' line of march.

At 10 a.m. Banks sent half his baggage to Winchester where it arrived safely, later he sent the second half with an infantry escort, this was captured by Ashby. Note the indiscipline of Ashby's cavalry and looting.

Banks sent one regiment to Middletown which delayed Jackson from Cedarville. Note rear-guard of 2,000 cavalry, and remarkable pursuit by night after battle in front of Winchester.

May 25th. Battle of Winchester.

Note:—1. The danger of detachments.

2. Indiscipline of Ashby's cavalry.
3. Steuart's "Pedantic Folly."
4. Difficulty of co-operation between detachments when attacking.
5. Jackson's expedient for replacing cavalry.

Jackson and Ewell attacked at Winchester, the former opposed by two and the latter by one brigade. There was no mutual support by either but the attacks were simultaneous.

The *Confederates* were double the number of the *Federals*, but when the *Confederate* cavalry was required to pursue it was looting.

The *Federal* cavalry charged to assist the retirement of Banks. Ashby went away to Berryville but Steuart would not take an order except through his immediate superior (Ewell). Jackson, therefore, put his gunners on horseback and sent them in pursuit.

Banks crossed the Potomac at Williamsport, north of Harpers Ferry.

Note the length of the *Confederates* marches.

Lee sends instructions to Jackson to press the enemy to Harper's Ferry and threaten Maryland.

May 29th. Jackson drives in the *Federal* piquets at Harpers Ferry.

Result of Jackson's Operations.

McDowell withdrawn from assisting McClellan and sent back to Washington for the second time.

Every available *Federal* in the west sent to Harper's Ferry.

McClellan told that he must either take Richmond at once or return to Washington.

Diary of Events.

May 24*th.* On 24th May, orders were sent to McDowell to send 29,000 troops *via* Manassas Gap and together with Fremont from Franklin, to cut off and capture Jackson's force.

Note how Jackson's action, in closing the roads after the battle of McDowell, operated on Fremont's march.

Note also Jackson's precarious position.

May 29*th.* Fremont had been ordered to move on Harrisonburg. This was changed on 29th. Fremont with 15,000 men was east of Moorfield. Shields was near Manassas Gap. But Jackson had good roads whilst the *Federals* had bad ones. Moreover the *Federals* had telegraphic communications but *no direct* inter-communication. Jackson had the choice of two routes and was superior to any single *Federate* force.

May 30*th.* Jackson marched south and reached Strasburg on afternoon of 31st. The 12th Georgia Regiment was overwhelmed at Front Royal. Ashby held off Fremont, who had stupidly taken up a defensive position at Cedar Creek.

June 1*st.* By night-time Jackson was safe at Woodstock.

McDowell should have marched on Staunton and *not* on Winchester as there was no time to go by Manassas Junction.

Jackson with his whole force at Woodstock finds his position untenable.

June 2nd. He falls back to the southern end of the Massanuttons in order to secure his line of retreat to Richmond. He burns the bridges at White House, Conrads Store, Columbia, Luray and elsewhere.

Fremont's force follows up the North Fork and Shields up the South Fork.

Note.—Intercommunication was only possible by the northern end of the Massanuttons. Jackson by retreating south would thus be able to keep his enemies separated and could communicate with Richmond as long as he did not let in Shields on his eastern flank.

The South Fork was unfordable below Port Republic. Jackson also burnt the bridge near Mt. Jackson. And at Harrisonburg he ferried his sick over the river to Staunton.

June 5th. Jackson's main force reaches Cross Keys.

Ashby killed in a rear-guard skirmish. A great blow to the "Army of the Valley."

Had Jackson burnt the bridge at Port Republic he could have attacked Shields, but Fremont's artillery could have assisted Shields in the battle. Besides Shields would have been directly on his communications. Thus Ewell was left at Cross Keys to stop Fremont whilst Jackson dealt with Shields.

Fremont, however, attacked rather earlier than was expected.

June 8th. Situation:—*Federals.* Fremont—15,000 men at Harrisonburg. Shields—13,000 spread out over 25 miles.

Confederates. Ewell—three brigades at Cross Keys. Jackson at Port Republic. About 16,000 men.

Note how Jackson adapted his strategy to the configuration of the country.

The Battle. Fremont attacked at Cross Keys and at the same time Shields' cavalry made a raid on Port Republic.

The *Federal* attacks were *not* concerted and Fremont employed only half his force. With superior force he attacked Ewell's right. Ewell reserved his fire till the enemy were within 60 yards. A vigorous counter-

attack by Trimble (on his own initiative) followed, with the result that Fremont at once withdrew his containing attack.

Note:—1. Trimble's initiative, the effect of his counter-stroke, the proper use of reserves.
2. The importance of co-operation in the attack.
3. The effect of running short of ammunition.

June 9th. *Action of Port Republic.*

Strong *Federal* position, guns on Coal Pit Hill.

At 5 a.m. movement against Shields began. The bridge made over the river was indifferent. Shields was strung out but his advanced troops (4,000) were in a strong position between the river and Coal Pit Hill.

Jackson sends Taylor's brigade to turn the enemy left flank.

Federals counter-attack checked. Pursuit by *Confederates* for 9 miles.

Jackson bivouacs at Brown's Gap, 9 marches from Richmond. McDowell's force at Conrad's Store, 15 marches from McClellan. Fremont at Mt. Jackson.

Lessons:—Effect of strong containing attack.
Effect of weakly improvised bridge.
Loss of way.

Lee realises that if he supports Jackson, McDowell would not be allowed to move on Richmond. Thus McDowell's corps was finally concentrated as a separate command at Manassas.

Lee sends two brigades to reinforce Jackson.

June 14th. Shields at Front Royal. Fremont and Banks at Middletown. McDowell's corps concentrated at Manassas.

June 17th. Jackson withdraws his entire force towards Richmond; reaching Ashland Junction on 25th June.

June 28th. Even on this date Banks thought that Jackson was about to attack him at Middletown. This indicates the excellent use of cavalry by Steuart, who screened the withdrawal of Jackson's troops with great skill and success.

Remarks on the Campaign, from which lessons can possibly be learnt, for future guidance.

Concentration of numbers at the decisive point.

Jackson's skill lay more in his strategical object than in his actual tactics. At Kernstown he failed tactically.

A preponderance in numbers does not always ensure victory.

At Winchester Jackson employed 16,000; about double the enemy's strength.

At Cross Keys Fremont attacked, but used only some 7,000 men whilst Ewell had only 8,000.

At Port Republic Jackson had 6,000 against Shields' 4,500.

Jackson always combined a front with an enveloping attack.

Jackson's eye for country, a new idea at that time.

Development of tactics to suit possibilities of modern conditions.

Employment of cavalry. When Jackson moved from Elk Run, to Staunton, he used his cavalry to screen his movements; and afterwards to seal up the passes south of Moorfield.

Note the personal influence of Jackson and Ashby.

Not only the characteristics of hostile commanders, but the methods of warfare adopted by opponents must be considered.

Effect of a small force on major operations. McClellan's plan was good, but Jackson's detachment deprived him of some 46,000 men.

Had the Federals gone straight ahead with their converging forces they might have succeeded, but the difficulty of doing so was too great for them. For example, Jackson's retirement from Harper's Ferry. In spite of the fact that Fremont and Shields were in telegraphic communication with Washington, they failed.

Jackson would not have taken up a flank position at Elk Run, had he been opposed by a commander of equal calibre. He might easily have been bottled up and Banks left free to march on Staunton.

Note use of the Massanuttons and South Fork of Shenandoah to prevent co-operation of Fremont and Shields.

Use of offensive action to upset adversary's plan; example, Milroy's attack at McDowell which greatly interfered with Jackson's plan.

Value of counter-attack at Bull Run and Kernstown.

Necessity for discipline and training as exemplified in the early stages of the war, the evils of short term enlistments. In this respect compare the enlistment organisation of the North with Lord Kitchener's "three years or the duration" in the Great War; if the North had enlisted for the "duration," it is doubtful whether the South could have held out for any length of time.

Note the evils of "Individualism" in the lower ranks of an army.

Simple plans are most suitable for ill-disciplined troops.

Note the effect of an initial victory in a campaign (Bull Run).

Danger of detachments not uniting in time.

Results of "piecemeal" attacks.

Reserves should not be used merely to guard line of retreat, *e.g.*, Garnett's action at Kernstown. There were, however, several instances of the correct use of reserves in this campaign.

LETTERS TO THE EDITOR.

Quetta or Camberley?

Dear Sir,

I am writing to ask whether any of your readers could give me advice in a matter which is rather close to my heart. In the July number of an English Service Journal there is an article on "How to Succeed in the Army" by "The Mother of Four Officers", and in it she states that officers who have been through the Quetta Staff College are not rated quite so highly as those who have gone through Camberley. I have just passed through Quetta and am an eligible bachelor; and the idea that I am slightly below the Camberley standard has rather blighted my hopes, for I have long been aware, when straightening my tie on entering a drawing room, that I am being weighed up by calculating feminine eyes, and I had hoped that in future I should be able to overcome the awkward feeling by knowing that my fingering was drawing attention to the tie's distinctive colours, and by being able to drop a few casual references to "when I was at the Staff College." But the "Mother's" article has brought home the fact to me, rather forcibly, that I may be faced with the question, "Oh, which Staff College were you at?" and that I may find myself stammering confusedly to the girl's parent, "Er-er, Quetta", and trying to tread on the cat's tail in order to create a diversion. For it's this daughter question that is worrying me. My object is the same as it always has been, to observe rigidly the principle of economy of effort, but I am now beginning to feel that I need a secure base to work from, and so I am on the lookout for a really wealthy young woman whom I can fall back on in case I lose my job. The thought that I shall be competing in this with men rated at a higher standard of intellect than mine fills me with gloom, nor can I avoid its happening, because the principles of peace are immutable and the Camberley bachelors are bound to be on the same tack. Could any of your readers give me advice as to how to overcome this handicap of inferiority? I should be truly grateful if they would help me to spend my declining years in comfort and not let me lose my objective to some cupidous Camberley fellow. I am not really so very deficient intellectually, for I have written to my mother, and she says of course not, even though I may take more after father than after her.

I am, Sir,
Yours faithfully,
JOHN HOOKER.

Who was Thackeray's Major Gahagan?

Sir,

The account of the career of Local Lieut.-Col. William Linnæus Gardner, given in the article "Was Thackeray's Major Gahagan?" in your July unmber, requires some corrections and additions.

(*a*) Gardner's first commission was not in H.M. 89th Foot, as is to be inferred from the article. He was commissioned as ensign, H.M. 63rd Foot, from 20th March 1783; and transferred to the 89th on 23rd April following.

(*b*) In 1796, as Colonel Maunsell states, Gardner went on half-pay again, as Captain of an Independent Company; but he resigned from H.M's. service in 1798.

(*c*) The date of his joining the Raja of Jaipur has so far as I am aware never been ascertained; but I have the best authority for saying that he was in the Jaipur service and at Jaipur itself, on 1st Sept. 1803. That is to say, Gardner had left Holkar's service before (and probably some months before) the battles of Assaye, Delhi and Laswari.

(*d*) It is incorrect to write of Alan Hyde Gardner as "the last Lord Gardner". This person was merely a claimant to the English and Irish baronies of Gardner of Uttoxeter and to the baronetcy of Gardner (cr. 9 Sept. 1794): he never established his right thereto. The position is thus correctly stated in Burke's Peerage; "Since the death of Alan Legge, 3rd Lord Gardner, 2nd Nov. 1883, the right to the baronies of Gardner has not been established, although an heir obviously exists". The titles are thus dormant, and have been claimed in recent years by representatives of two branches of the family.

I am, etc.,

29th July 1932. B.

Three Arms and Six Legs.

Sir,

"Phœnix" in his article "Three Arms and Six Legs" has attempted to show that the bayonet is an essential weapon for Cavalry in order that it may carry out its duties fully, especially on the Frontier of India.

I do not think that the fact of its desirability will be disputed by many cavalrymen, most of whom have probably served at one time or other on the Frontier. I do not propose to enter into a discussion as to the advisability or otherwise of re-arming Cavalry with bayonets. That is a matter of weighing up the advantages of its re-introduction, against the disadvantages of efficiency lost in time taken in bayonet training, which is at present allotted to training in subjects which are considered more essential.

"Phœnix" (a cavalryman himself) states that "*The real trouble is that cavalry don't want the bayonet now*". He invites his readers to find the reasons for this objection, by reading his article again from the beginning. I have done so.

I will pass no comment on the somewhat irrelevant remarks concerning the cavalryman's possession of seven pairs of shining boots, and the thrill of the lance pennon; except that the lance has now been abolished as a weapon for war for Indian Cavalry, as well as British, and that seven pairs of shining boots are difficult to maintain at present for financial reasons.

His remaining (not entirely relevant) reasons, however are worthy of remark. They may be summarised as follows:—

(1) Equitation and training of horses receive too much consideration.

(2) Horses are incorrectly trained by the use of unnatural obstacles, and pampered by soft going.

(3) The cavalryman's objection to getting off his horse, and his apparent desire to sit on one to retain the "Cavalry Spirit."

I propose to comment on these subjects with a view to clearing up a certain amount of misunderstanding which may possibly exist with others as well as "Phœnix".

1. *Equitation and training of Horses receive too much consideration.*

It has been the policy for some years in the training of cavalry to eradicate this fault which existed some years ago. The training of a remount now takes on an average 12 months ; it is doubtful if this can ever be reduced appreciably and economical efficiency retained. Consideration must be given to the fact that if young horses are advanced in their training too rapidly, their legs are liable to not stand the strain, and that they may be prematurely broken down. When a horse has been passed into the ranks, he receives little additional training other than that received on equitation parades.

During the Individual Training Season 1932, the proportion of hours spent on equitation, in one Indian Cavalry Regiment, compared with hours spent on other subjects of training was as 1 is to $4\frac{1}{2}$.

(These are actual figures, taken from detailed records kept of one squadron, and do not include educational training or routine parades such as " stables ").

2. (*a*) *Horses are trained mostly over " Imitations of obstacles found in England and places outside India."*

This statement is incorrect. The obstacles used for the training of this same regiment, and of several others that I have seen, are mostly imitations of (or actual) mud walls, banks, ditches, water cuts, nalas, sunken roads and thorn fences, all of which are met with in India. There are a few timber and brushwood fences to give variety and to accustom horses to unusual obstacles.

(*b*) *Horses are Pampered by soft going.*

" Given practice over rocky country.....their feet harden and so withstand the jar." The horses (of his regiment) *after several years on the frontier had feet of iron.....Few were lame."*

I venture to question the soundness of the policy implied by these statements, for the following reasons :—

The regiment, to which I have already referred, during a tour of duty on the frontier, suffered remarkably little from casualties in lameness from the hard going. After leaving the frontier, the trouble started. A phenomenal number of horses showed signs of lameness due to ring bone, side bone and pedal ostitis. They truly had " *feet of iron* ", and eventually a considerable number had to be destroyed.

It is neither sound from a training point of view, economical, nor humane, to jump horses on to or train them on hard ground if soft going is available. Horses feet harden up remarkably rapidly as soon as hard and stony going is met with. Practice in this is unnecessary.

Also any soldier worthy of the name is capable of realizing that "*anything rougher and more likely to damage a horse*" than a parade ground or a prepared surface is not "*a thing to be avoided*" when the slightest necessity arises.

(3) *The Cavalryman's objection to getting off his horse, and his apparent desire to sit on one to retain the "cavalry spirit."*

I do not propose to discuss fully the subject of the "cavalry spirit." I will, however, state that it is in no way connected with "*sitting on a horse*" or "*the charge.....carried out haphazard.*"

In the last century very great advances have been made in the power of rifle and artillery fire; automatic weapons and A. F. V's. have been introduced. The principles of war still remain the same, but the method of employment of all arms has changed and is still changing.

By referring "Phœnix" to Cavalry Training Vol. II, 1929, Sections 1 and 49, and Manual of Operations on the N.-W. F. of India, Section 10, further comments by me will be unnecessary.

The bayonet is highly desirable for cavalry employed on the frontier. For this reason, a proportion of bayonets is now issued to all British and Indian Cavalry units stationed in that area.

But the reasons for bayonet training being excluded from the cavalry training programme, are in no way connected with shining boots, lance pennons, soft going or sitting on horses.

I have never shared with "Phœnix" his "*feeling of compassion for the P. B. I.*", and I hope that the Infantryman in the same way saves himself the trouble of having any feeling of compassion for the

"CAVALRYMAN."

SIR,

I read with much pleasure Cavalryman's critique of my article "Three Arms and Six Legs" and am proud that it spurred him to write so spirited a reply.

I will pass no comments on the irrelevant portions of his letter but will confine myself to the matter of bayonets. Here we seem to be almost at one.

He agrees that bayonets are highly desirable for cavalry on the frontier and concedes that most cavalrymen will not dispute the desirability of arming the cavalry with bayonets. Nevertheless he doubts the advisibility of so arming the cavalry because of the time lost in training in more essential work. If ever it is his fortune to face Pathans at close quarters on a frontier hill he will find that bayonet work ranks quite high among the essentials.

Let him disabuse himself of the idea that bayonet training need take up much time. An average of once a month over the assault course was found to be ample for a cavalry soldier, and (hush! dare I say it?) the time can be taken from that now allotted to anti-aircraft firing, field engineering and even from physical training itself! I nearly suggested cutting out half an hour of Educational Training a month, but that would be rank heresy. One would naturally, when approaching a hill top, prefer to be surrounded by 3rd or even 2nd class Certificates of Education than by men who can use bayonets.

The proportion of bayonets (50 per regiment I believe) now issued to cavalry units on the frontier is inadequate for fighting. Indeed they are only intended for guard duties. Either the regiments who have them do not train their men to use them or, worse still, they waste precious time in so doing.

Yours faithfully,

"PHOENIX."

MILITARY NOTES.

BELGIUM.

Conscientious objectors.

The Council of Ministers has refused to allow men incarcerated for refusal to carry out their military service to be treated as political prisoners. This decision is generally welcomed by the press.

FRANCE.

Ministry of National Defence.

On the formation of the Tardieu Government in February, the Ministers of the three fighting services were abolished, and their duties assigned to a Minister of National Defence assisted by two Under-Secretaries. The control of the commercial side of civil aviation was transferred to the Minister of Public Works.

This change had been suggested in the past on many occasions and the plan actually adopted had been under study for the past two years, the late M. Maginot, as Minister of War, having had an important part in its development.

The General Staffs of the three services continued as hitherto, as did also their *Conseils Supérieurs*, but for higher strategical purposes there was formed a " Committee of National Defence " composed of the Minister and the three Vice-Presidents of the three *Conseils Supérieurs*.

With the advent to power of the new Government with M. Herriot as Prime Minister, the National Defence Ministry, which was introduced by M. Tardieu, has disappeared and the three separate ministries for the fighting services are revived. The ministers are :—

War	.. ..	.. M. Paul Boncour.
Marine	.. ..	.. M. Georges Leygues.
Air	.. ..	.. M. Paul Painlevé.

A decree was published on 6th June constituting yet another new committee entitled *Haut Comité chargé de cordonner les besoins de la défence nationale.*

This committee will study the questions which affect the employment of the land, sea and air forces, their general organization, the general programmes of armament and the distribution of budgetary credits for this organization and these programmes.

IRAQ.

League of Nations.

As the result of a meeting of the Council of the League of Nations held on 19th May, a draft declaration was approved, in which is set out the guarantees required by the Council of the League of Nations on the cessation of the Mandate in Iraq. These guarantees cover :—

(*i*) The effective protection of racial, linguistic and religious minorities ;

(*ii*) The safeguarding of the interests of foreigners in the judicial sphere ;

(*iii*) Freedom of conscience and the safeguarding of the activities of religious missions ;

(*iv*) Rights acquired and financial obligations contracted by the Mandatory Power before the termination of the Mandate;

(*v*) Respect for international conventions ;

(*vi*) The concession to States members of the League under certain conditions of most-favoured-nation treatment, subject to reciprocity ; and

(*vii*) The right of the members of the League represented on the Council to lay before the Permanent Court of International Justice any difference of opinion arising out of the interpretation or execution of the undertakings assumed by Iraq before the Council.

The Iraq Government is expected to affix its signature to this declaration and to be formally admitted to the League at the meeting of the Assembly in September.

Oil Concession.

Early in the year negotiations were undertaken between the British Oil Development Company and the Iraq Government for the exploitation of oil concessions on the West bank of the Tigris. The concessions on the East bank, it will be remembered, are held by the Iraq Petroleum Company, who are building the pipe line to Haifa and Tripoli. The negotiations with the new company have now been completed, and the

contract was signed on 20th April. The general terms of the agreement include the following :—

(*i*) The lease of the concession shall be for seventy-five years ;

(*ii*) The rent shall be £100,000 for the first year, rising by £25,000 per annum to £200,000, which rent shall cease as soon as the transport of oil shall commence ;

(*iii*) The royalty payable shall be four shillings per ton ; and

(*iv*) The Iraq Government shall receive 20 per cent. of all oil produced, to be sold or disposed of as they may think fit ;

(*v*) Though German, Italian and French capital is sunk in the company as well as British, it is an essential part of the contract that the control of the company shall remain in British hands.

ITALY.

Alpine training in the Italian Army.

Exercises in the Alps and especially the training of Alpine troops in the use of skis have been the subject of special attention this winter in the Italian Army.

Ski training is divided into winter training, officers' training and advanced summer exercises.

LATIN AMERICA.

Peru.

Naval Mutiny.

On 7th May the crews of the Peruvian warships " Coronel Bolognesi " and " Almirante Grau, " which were in Callao Harbour, mutinied and imprisoned their officers. A loyal sailor swam ashore and warned the Government authorities, who were thus able to take immediate steps to deal with the mutiny. Troops were brought down from Lima and aeroplanes and submarines made a show of force against the mutineers who promptly surrendered. The Government declared martial law for 15 days. The mutiny was accompanied by disturbances in the streets of Lima, but the Government soon had the situation in hand.

The trouble was communistic in origin and was also said to be connected with plot by the " Aprista " or Labour Party to raise a rebellion in the northern provinces of Peru. Senor de la Torre, the

leader of this party, was arrested on a charge of complicity in the recent attempt on the life of the President, Colonel Sanchez Cerro. Eight of the mutineers were executed.

MOROCCO.

Spanish Zone.

On 29th March, speaking in the Cortes, Senor Azana (Prime Minister and Minister of War) stated that reorganization in Morocco had effected a saving of nearly 25 per cent. on last year's estimates, *viz.*, 174 million pesetas (£4¼ millions at 40 p. to the £1.) As soon as the main road from Melilla to Tetuan is completed the garrison can be halved and this saving doubled. (Work on this road appears to be seriously delayed at present owing to lack of funds).

Army reorganization.

Replacement of conscripts by volunteers.

A law published on 15th May enacts that :—

1. In future, as far as funds permit, the effectives of all the corps and units of the Army serving in Morocco shall be recruited voluntarily.

2. All Spaniards and naturalized Spaniards between the ages of 18 and 40 are eligible to enlist as volunteers, if unmarried or widowers without children. They are, however, to be required to produce proofs of identity and of good character, and be passed by a Medical Board as physically fit.

3. Volunteers will enlist for four years and receive a bonus of 500 pesetas. Afterwards they may re-engage for various periods. The rank and file cannot, however, remain with the colours after attaining the age of 45 (serjeants 48).

4. When the requisite numbers for the army in Morocco are not forthcoming, either through shortage of funds or because enough volunteers have not presented themselves, the contingents will be completed by conscripts, selected by ballot.

In the same way corporals and serjeants may be posted compulsorily to the units in Morocco.

FRENCH ZONE.

Tafilalet operations.

As a result of the Tafilalet and Ferkla Valley operations at the beginning of this year, more than 30,000 families have subsequently made their submission. Communication through this area will be improved by a track suitable in most parts for motor vehicles and throughout for motor cycles with a view to joining Agadir on the Atlantic coast *viâ* the Sous Dades and Ferkla Valleys to Colomb Bechar in Algeria. The only areas of dissidence now remaining are the sparsely cultivated mountainous regions of the Great Atlas and the waterless regions in the extreme south of the Saharan border.

SIAM.

The Political Situation.

A political upheaval occurred in Siam towards the end of June when by a *coup d'état* the newly-formed People's Party, composed principally of members of the Army and Navy, seized control of the capital and arrested as hostages Prince Paribatra, heir to the throne, and various other important personages. King Prajadhipok was absent from Bangkok at Hua Hin, a seaside resort about 140 miles from the capital.

Following the outbreak, a manifesto was issued on 24th June accusing the King of misgovernment and the princes of battening on the people ; it stated, however, that the King would be invited to retain the throne as a constitutional monarch with an elected assembly, and that failing this a Republic would be established. This invitation was extended to the King by letter, and at the same time it was pointed out that if he refused another prince would be appointed in his place. King Prajadhipok returned to Bangkok during the night 25/26th June, apparently in a warship sent to bring him to the capital, and, after a meeting with representatives of the People's Party, he issued a proclamation accepting the new régime and stating that his views were in accord with those of the Party as to the necessity for a new form of Government which he had for some time recognized as desirable. A proposed Constitution was presented to the King on 26th. This he accepted, with minor alterations, on the following day. According to press reports the new Constitution is partly democratic in character as power is to be invested in the people but exercised for the present by (*i*) a Monarch, (*ii*) a People's Senate, (*iii*) a Committee of the People's Party and (*iv*) the Law Courts. King Prajadhipok is to be the

Monarch and succession to the Throne is to be in accordance with the existing law. Amnesty has been granted to all concerned in the insurrection.

SPAIN.

Military laws.

A Decree was published on 25th February embodying the following provisions :—

(1) Authorising placing on the reserve by Government Decree such general officers who for more than six months have been unemployed, provided that during that period appointments have been made for which their rank qualified them.

(2) Providing that the pensions of 12,000 officers, retired under special conditions on full pay, when the army was reorganized after the fall of the Monarchy may be suspended when an offence is incurred against Article 1 (acts of aggression against the Republic) of the Defence of the Republic Act.

(3) Prohibiting the publication of military and naval newspapers with the exception of the technical publications of the War and Marine Ministries.

It is also interesting to note that Senor Azana now gives the number of officers who have retired voluntarily as 12,000. The previous figure given was 10,000.

The Army in 1931.

Terms of service.

In spite of the great changes carried out in the Spanish Army in 1931, there has been no change in the liability to serve or the length of service of the normal recruit.

Peace organization.

Peninsula.

As a result of the Decree of 26th May and subsequent Decrees issued by the Provisional Government, the whole aspect of the army has been changed. The following units have been disbanded :—

37 infantry regiments (out of 76).
4 mountain battalions (out of 12).
9 light infantry battalions (out of 17).
17 cavalry regiments (out of 27).
1 railway battalion (out of 2).
2 engineer battalions.

The infantry divisions have been reduced from 16 to 8. The cavalry division has been maintained. Two mountain brigades, composed of all arms except cavalry, also remain.

The new organization envisages two tank regiments, the formation of a new machine-gun battalion and the provision of essential ancillary troops.

The Regional Commands have been abolished and three Inspectors-General have been appointed to ensure co-ordination and inspection. These in no way inherit the political and social powers enjoyed by General Officers Commanding-in-Chief ("Captains-General") of the regions. Many of the purely military powers of the latter devolve upon the Divisional Commanders, who are now given authority over all troops located within their divisional area. Formerly in practice these only exercised command over the infantry or cavalry regiments of their respective divisions.

Strength of the army in peace.

The advent of the Republic found 22,000 officers in the Army List, of whom some 15,000 were on the active list. The new Government reduced the total number to 8,000 by allowing officers to retire on the full pay of their rank.

According to such figures, as are available, the strength of the army after the 1931 reduction is as under :—

(*a*) In the Peninsula and Canary Islands—

Officers.	Other ranks.	Total.
6,124	98,114	104,238

(*b*) In Morocco.

Officers.	Other ranks.	Total.
1,876	45,849	47,725

Infantry reorganization.

Each infantry division will include 2 infantry brigades, each of 2 regiments of 2 battalions. Each battalion will consist of—

4 rifle companies.
1 machine-gun company.
Specialists section.

Cavalry reorganization.

The composition of the cavalry division is as follows :—

Divisional headquarters.

3 cavalry brigades of 2 regiments of 2 groups, each group consisting of 2 sabre squadrons and 1 light automatic squadron.

1 (infantry) cyclist group consisting of 1 rifle company and 1 machine-gun company.

1 group of motorized machine-gun squadrons.

1 horse artillery regiment of 3 brigades of 3 batteries each.

1 field squadron.

1 signal group (horse), consisting of 1 visual and 1 W/T section.

1 aviation (observation) squadron.

1 cavalry ammunition column.

1 supply company (M. T.).

1 medical section (M. T.).

1 mobile veterinary section.

Artillery reorganization.

In consequence of the recent changes, the Peninsular artillery will be as under :—

(*a*) *Divisional artillery.*—Each infantry division will include 2 field artillery regiments (one of guns and the other of howitzers). Each regiment will consist of 2 brigades of 3 batteries and will hold in reserve guns and equipment for a third brigade.

(*b*) *Cavalry divisional artillery.*—One horse artillery regiment of 3 brigades, each of 3 batteries.

(*c*) *Artillery in mountain brigades.*—Each of the 2 mountain brigades will include 1 mountain artillery regiment of 2 howitzer brigades, each of 3 batteries.

TURKEY.

Turkish visit to Moscow.

The Prime Minister of Turkey, Ismet Pasha, accompanied by Tewfik Rushdi Bey, the Minister for Foreign Affairs, and a large party of Turkish notables, arrived in Moscow on 26th April on an official visit to the Soviet Union.

The visit closed on 8th May after an official announcement that the Soviet Union had granted Turkey credit for 8 million dollars worth of agricultural and textile machinery to be repaid over a period of ten

years in instalments of Turkish produce, and had presented the Turkish Army with ten tractors, five tanks and some other vehicles.

U. S. A.

The Reserve Officers Training Corps.

The objects of the Reserve Officers Training Corps are first to provide officers for the Officers Reserve Corps, and secondly to give such instruction to students who do not complete the full course, as will make them useful in the army in time of emergency or in the National Guard or Organized Reserves in peace time.

The corps is organized in Senior and Junior Divisions. The Senior Division is composed of units at universities, colleges and schools which grant degrees and at certain " military schools " designated by the Secretary of State. Units are formed for practically all arms of the service. The Junior Division is formed of units at other schools. It consists of infantry units only and the training is more elementary than that of the Senior Division.

The following figures for the year 1931 give an indication of the importance of the corps :—

—	Units.	Personnel.
Strength of Senior Division	220	75,000
Strength of Junior Division	106	41,000
Number of camps held	67	
Attendance at camps	6,700	
Number of regular officers employed as instructors.	679 active and 92 retired.	
Number of commissions given to graduates during the year	5,150	

REVIEWS.

The Desert Column. By Ion. L. Idriess.

(*Messrs. Angus and Robertson, Ltd., Sydney, Australia*). 6/-

This book is based on the diary kept by the author during his service in Gallipoli and in Palestine and in it he has managed to retain the vividness of the feelings which impressed him at the time. The author, who was a trooper in the Australian Light Horse, is at his best in his narrative of the work of the Desert Column from the Suez Canal up to the Gaza battles. Here he deals with open warfare and the many problems which still confront us in that form of fighting. The difficulties of keeping operations fluid ; of avoiding disorganization when troops get closely engaged ; of keeping the offensive spirit under most disheartening circumstances ; of retaining mobility in sandy, waterless country are all exampled, and the conclusion arising from their examination is that a spirit of individuality such as permeated the Light Horsemen is a necessity if the best results are to be achieved.

It is doubtful whether we in the regular army aspire to this ideal sufficiently and the Desert Column may help to convince some of us that the stereotyped is by no means always the best.

H. R. S.

The Indian Ocean. By Stanley Rogers. Illustrated by the Author.

(*George C. Harrap & Co., Ltd.*, 1932). 7*s.*/6*d.*

This is the third of a series of books by Mr. Rogers dealing with the great oceans of the world, the previous two being *The Atlantic* and *The Pacific*. In his Foreword the author remarks—"Histories have been written of peoples, of religions, and of countries, so why not of an ocean ?" and the result is a book full of interesting facts written in a simple yet fascinating manner. Mr. Rogers himself voyaged all over the world, often in wind-jammers, and when he writes of India, China and Australia clippers and their famous races, one realizes that he is writing from first hand knowledge. "To hell or Melbourne in sixty days" was the

boast of that gallant breed of seamen whose sole object was to make a quick passage irrespective of the weather. This work is intended to be more of an entertainment than a text book, but authenticity has not been sacrificed and the various chapters give an outline of events in the Indian Ocean from the time of the early Portuguese Adventurers to the present day. Many changes have occurred since passengers furnished their own cabins in preparation for a voyage lasting months, and the author hesitates to think what monstrosities will shuttle across to India in 2032. It is difficult to pick out the most interesting features of this romance of the sea, all chapters are equally enthralling, but perhaps the description of the Indian Ocean during the early months of the war 1914—18 will again remind one how vital it is to safeguard our shipping lanes. The exploits of the German raider *Wolf* are apt to be overshadowed by the feats of the cruiser *Emden*, but Mr. Rogers pays a tribute to her resourceful Captain (Karl Nerger) in his description of how she evaded capture for fifteen months and took fourteen vessels before successfully returning to Germany. The author has greatly added to the charm of the book by his delightful drawings.

J. E. H.

Indian Infantry Colours. By Captain H. Bullock, F.R. Hist. S., I.A. (*Times of India Press*, Bombay, 1931). Rs. 15/-

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Any book dealing with such an absorbing question as the colours of regiments of the Indian Army could scarcely fail to be of interest, and Captain Bullock's " Indian Infantry Colours " is no exception to this.

The author's ideas as to the origin of colours in the old East India Company " Nishan " is particularly interesting and deserving of further examination. To trace the present regimental colours back to the East India Company's Bale Mark is ingenious ; for the traders " Nishan " of 1658 did, indeed, become the soldiers' " Nishan " of 1805—13.

As symbols embodying the spirit of a unit, corps or company, the true origin of colours must be sought far back in the dim beginnings

of history. Small pieces of stone, which have been unearthed in excavations in India, have confirmed the cult of the standard in the East over 5,000 years ago. We know, also, from the Bible that the people of Israel recognized these symbols, as the following extract from Number II, Chapter 2, shows :—" The people of Israel shall pitch every man by his own standard with the ensign of their fathers house." It is, of course, common knowledge that the Knights and Barons of old had their company standards or colours.

The company " Nishan " is, thus, but a step in the long and interesting history of standards. Captain Bullock traces the change from company to battalion and regimental colours: this change, he points out, having been made in King William III's time in the Regular Army at Home.

The scope of " Indian Infantry Colours " is to trace in narrative form details in connection with these colours from their earliest days down to 1781, when the first known regulations were issued. The second part of the book deals with a summary of their successive development and design. Finally, the author has added certain chapters dealing with colours of various groups of past and present regiments, which are fairly representative of Indian Infantry as a whole.

The book should be of interest, not only to India Infantry units, but also to those British Infantry battalions, who spring from those famous regiments usually known by the collective title as " The Company's Europeans."

The book is well illustrated with several attractive plates in colour.

R. N. G.

" **Passing it on.**" Short talks on Tribal fighting on the North-West Frontier of India.

By General Sir Andrew Skeen, K.C.B., K.C.I.E., C.M.G.

(Gale and Polden Ltd.). 5/-

In this little book of only 128 pages a great frontier soldier " passes on the wise teaching of his seniors " to the present generation of serving soldiers—and may be to their successors, as frontier fighting, dictated as it is more by the nature of the country than the armament and methods of the enemy, changes slowly.

Although it was by no means his first frontier campaign, it was columns in command of the Tochi and Derajat in the operations against the Waziris and Mahsuds in Waziristan in 1919 that General Skeen made his reputation as a frontier soldier—a reputation which will not easily fade from the pages of Indian frontier history and will certainly remain always very high in the memories of all who took part in those campaigns with him. Coming, as they did, immediately after the Great War, they found India war weary and without troops or officers trained in mountain warfare. The tribesmen, on the other hand, were well-equipped with modern rifles and ammunition, with their ranks full of many ex-regular soldiers and militiamen well-versed in our methods, and flushed with the success of a series of damaging raids into British territory which we had been unable to prevent or to punish. In the resulting operations, in both of which General Skeen commanded the striking forces, the most stern and bitter fighting which has ever occurred on the frontier was experienced. That the Derajat Column eventually, after several severe reverses and heavy casualties, succeeded in turning the tables on the Mahsud and completely subduing him says much for the sticking power of the troops and the determination of their British officers, but only those who were brought into close contact with him from day to day during those strenuous and anxious times know how much was also due to the courage and leadership of the Column Commander himself.

General Skeen's last appointment in India was Chief of the General Staff during which time he brought out the present "Manual of Operations on the N.-W. F." which still remains the official text-book on Mountain Warfare.

To the great regret of his many friends and admirers he was compelled through ill-health to retire from the Army a few years later. There is no one better qualified to speak or to write on the subject of frontier warfare than he is and his book was certain of an eager welcome.

It is addressed "to the junior officer of Infantry, of the British Service in particular, as he is less likely in his wider range of service to be trained for the local problem which all officers in India have to keep in mind. To officers of Infantry, because that is the arm on which falls in chief part the need for adjusting its methods to the circumstances of this special form of war. And to junior officers, because in frontier fighting the junior officers' problems are many and varied, and their

correct solution far more important in immediate results than in any other form of war."

The book covers every form of frontier operation and it visualises each one in considerable detail. It may be considered that some of this detail is unimportant, but success in this form of warfare depends very largely on attention to detail and, if the reader is going to get full value from this book, he must read it with a very alert and concentrated mind. The book would undoubtedly have been improved by explanatory diagrams—the picture which the author sees so clearly in his mind may not be quite so clear to the average reader.

Of particular interest is the emphasis laid on the organization and the care of the transport, both animals and drivers. This was always a point to which General Skeen rightly insisted that the strictest attention should be paid.

The book is full of delightful flashes of humour of which the following are two examples.

"By the way, look out for bees. A certain Highland battalion might still tell you, if decency permitted, of the value the men got from their kilts in saving their faces at the expense of other parts when the bees of Maizar resented the burning of their homes. Another argument, if one were needed, against indiscriminate burning of houses."

"Another hint—do not halt your men on tracks or near conspicuous rocks and so forth. These are always known ranging marks. And your men will not halt near you."

"Officers and white stones"—the old soldier's rule still holds.

General Skeen has indeed "passed on" much that will not only be of value to the junior regimental officer, for whom the book is written, but the junior staff officers to whom a knowledge of the detail and procedure which has to be carried out within the unit is, of course, essential.

J. G. S.

Of interest to Staff College Candidates

"Your Course for the Staff College Examination is exceedingly well arranged, and no trouble is spared to meet individual needs. The instruction provided was of a very high order. I consider that the full Course or any part of it provides very high value at very moderate cost, and is far superior to any other method of preparation."

(From an officer who succeeded in gaining admission to the Staff College at the 1931 Examination).

UP-TO-DATE POSTAL INSTRUCTION FOR STAFF COLLEGE ENTRANCE EXAMINATION

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Prospectus on application.

United Service Institution of India.

JANUARY 1932.

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REVIEWS.

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I.—New Members.

The following new members joined the Institution from 1st September to 30th November 1931:—

ORDINARY MEMBERS.

Lt.-Genl Sir Torquhil G. Matheson, K.C.B., C.M.G.
Colonel Abdur Rahman Khan.
Captain H. F. C. Armstrong.
Captain G. F. X. Bulfield.
Captain L. A. Loup.
Captain A. V. Perry.
Lieut. F. W. Crafter.
" B. H. Craig.
" K. T. Darling.
" E. Garnett.
" L. N. Gibson.
" S. Griffith.
" H. G. Orr.
" B. T. Paranjpe.
" M. C. Perceval.
" S. R. G. Scott.
" W. J. M. Spaight.
" A. E. G. Walker.
" K. M. Wright.
2nd-Lieut. R. F. Barbour.

II.—The Journal.

The Institution publishes a Quarterly Journal in the months of January, April, July and October, which is issued postage free to members in any part of the world.

Non-members may obtain the Journal at Rs. 2 annas 8 per number, or Rs. 10 per annum. Advertisement rates may be obtained on application to the Secretary.

III.—Contributions to the Journal.

Members and the public are invited to contribute articles to the Journal of the Institution. Articles may vary in length from three thousand to ten thousand words. Payment is made at from Rs. 30

to Rs. 100 in accordance with the value and length of the contribution. Payment is made on publication.

Articles submitted for publication must be typed in *duplicate,* on one side of the paper only. Drawings, plans, maps, etc., for reproduction should be in *jet* black. No washes or ribands of colour should on any account be used. If it is absolutely necessary to use colours (and these are only permissible in line work or names) the following will reproduce photographically, *i.e.*, dark red, dark orange, dark green. No other colour should on any account be used.

With reference to Regulations for the Army in India, paragraph 204 and King's Regulations, paragraph 522, action to obtain the sanction of His Excellency the Commander-in-Chief to the publication of any article in the Journal of the United Service Institution of India will be taken by the Executive Committee of the Institution.

Anonymous contributions under a *nom-de-plume* will not be accepted or acknowledged; all contributions must be sent to the Secretary under the name of the writer and the paper will, if accepted, be published under that name unless a wish is expressed for it to be published under a *nom-de-plume.* The Executive Committee will decide whether the wish can be complied with.

The Committee reserve to themselves the right of omitting any matter which they consider objectionable, and do not undertake to authorise the publication of such papers as are accepted in the order in which they may have been received.

Manuscripts of original papers sent for publication in the Journal will not be returned to the contributor unless he expresses a wish to have them back and pays the postage.

Articles are only accepted on these conditions.

Contributors will be supplied with three copies of their paper *gratis,* if published.

IV.—Reading Room and Library.

The United Service Institution of India is situated in the Mall, Simla, and is open all the year round—including Sundays—from 9 A.M. until sunset.

The Reading Room of the Institution is provided with most of the leading illustrated papers, newspapers, magazines, and journals of military interest that are published. Papers, magazines, "works

of reference" or books marked "Not to be Taken Away," or noted as "Confidential," may not be removed from the Reading Room.

There is a well-stocked library in the Institution, from which members can obtain books on loan free, in accordance with the following rules:—

(1) The Library is only open to members and honorary members of the United Service Institution of India. Members are requested to look upon books as not transferable to their friends.

(2) No book shall be taken from the Library without making the necessary entry in the register. Members residing permanently or temporarily in Simla are requested to enter their addresses.

(3) The United Service Institution of India is open all the year round—including Sundays—from 9 A. M. until sunset. Books may be taken out at any time provided Rule 2 is complied with.

(4) A member shall not be allowed, at one time, more than three books or sets of books.

(5) Papers, magazines, "works of reference" or books marked "Not to be Taken Away," or noted as "Confidential," may not be removed.

(6) No particular limit is set as to the number of days for which a member in Simla may keep a book, the Council being desirous of making the Library as useful as possible to members; but if after the expiration of a fortnight from date of issue it is required by any other member it will be re-called.

(7) Applications for books from members at out-stations are dealt with as early as possible, and books are despatched per Registered Parcel Post. They must be returned carefully packed per Registered Parcel Post within one month of date of issue.

(8) If a book is not returned at the end of one month, it must be paid for without the option of return, if so required by the Executive Committee.

(9) Lost and defaced books shall be replaced at the cost of the member to whom they were issued. In the case of lost books which are out of print the value shall be fixed by the Executive Committee, and the amount, when received, spent in the purchase of a new book.

(10) The issue of a book under these rules to any member implies the latter's compliance with the rules, and the willingness to have them enforced, if necessary, against him.

(11) A list of all books presented and purchased, and also a list of books useful to members studying for the Staff College and Promotion Examinations, will be found under Secretary's Notes in the quarterly issue of the U. S. I. Journal.

(12) Members are invited to contribute presents of books, maps and photographs of naval and military interest. These may be addressed to the Secretary, U. S. I. of India, Simla. They will be duly acknowledged.

(13) The catalogue of the Library is completed to 31st March 1924. Price Rs. 3-8-0 or postage paid Rs. 3-14-0. An addendum completed up to 30th September 1927 is available. Price annas 8 *plus* postage annas 4.

V.—New Books.

BOOKS PRESENTED.

	Title.	*Published.*	*Author.*
1.	Tactical Schemes with Solutions, Series II. (Presented by Messrs. W. Clowes & Sons, Ltd., London.).	.. 1931	.. S. W. Kirby and Kennedy.
2.	Strategy and Tactics of the Egypt and Palestine Campaign 1917-18, 2nd Edn. (Presented by Messrs. Gale & Polden, Ltd.).	.. 1931	.. A. Kearsey.
3.	Saddle-Room Sayings (Presented by the Oxford University Press).	.. 1931	.. William Fawcett.
4.	Lectures on F. S. Regulations, II. (Presented by Messrs. Sifton Praed & Co., Ltd.).	.. 1931	.. J. F. C. Fuller.
5.	The Official History of the War, Military Operations in Togoland & the Cameroons 1914-16. (Presented by H. M. Stationery Office, London).	.. 1931	.. F. J. Moberly.

Books Presented.

	Title.	*Published.*	*Author.*
6.	Foch—The Man of Orleans (Presented by Messrs. Eyre & Spottiswoode Ltd., London).	.. 1931 ..	B. H. Liddell Hart.
7.	The Elements of Imperial Defence. A Study of the Geographical Features, Material Resources, Communications and Organization of the British Empire. (Presented by Messrs. Gale & Polden Ltd.).	.. 1931 ..	A. G. Boycott.
8.	The Story of the 9/7th Deccan Infantry (Presented by the 3/19th Hyderabad Regiment).	1929 ..	W. C. Kirkwood.
9.	The Warning of Kashmir	.. 1931 ..	G. S. Raghavan.
10.	History and Status of Landlords and Tenants in the United Provinces (Presented by the Pioneer Press, Allahabad.)	.. 1931 ..	S.N.A. Jafri.

Books Purchased.

1.	The Indian Mutiny in Perspective	.. 1931 ..	Sir G. MacMunn.
2.	The War in the Air, Vol. III.	.. 1931 ..	H. A. Jones.
3.	The Uneasy Triangle.	.. 1931 ..	"Apex".
4.	Marshal Lyautey	.. 1931 ..	Andre Maurois.
5.	Military Organization and Administration, 11th Edn.	1931 ..	W. G. Lindsell.
6.	From Surtees to Sassoon	.. 1931 ..	F.J.H. Darton.
7.	Allenby of Armageddon	.. 1925 ..	Ramond Savage.
8.	The History of Coke's Rifles	.. 1930 ..	Col. H.C. Wylly.
9.	The Burma Rebellion Report up to 3rd May 1931.	.. ..	
10	The Five Year Plan of the Soviet Union.	.. 1930 ..	G. T. Grinko.

BOOKS PURCHASED.

	Title.	*Published.*	*Author.*
11.	At G. H. Q.	.. 1931	.. Brig.-Genl. John Charteris.
12.	India in Revolt.	.. 1931	.. J.F.C. Fuller.
13.	Europe in the Nineteenth Century, 1789-1914.	.. 1929	.. A. G. Grant and H.W.V. Temperley
14.	The Shenandoah Valley Campaign, 1861-62.	.. 1930	.. A. Kearsey
15.	India Insistent	.. 1931	.. Sir Harcourt Butler.
16.	The Gas War of 1940	.. 1931	.. "Miles".
17.	The World Crisis—The Eastern Front	.. 1931	.. Hon. Winston S. Churchill.
18.	The Indian Empire Series (Pamphlets).—		
	The Simon Report and After		.. Sir Reginald Craddock.
	Mr. Sastri's Attack on the Simon Report.		.. Sir Michael O'Dwyer.
	The Power of the Indian Minorities		.. Sirdar Ikbal Ali Shah.
	The Situation in India.		.. Retired Indian Judge.
	India After the R. T. C.		.. Sir Reginald Craddock.
	British Ideals and Indian Politics.		.. Member of the I.C.S.
	The Federation of India		.. Lord Sydenham of Combe.
	The Indian Crisis		.. Sir Mark Hunter.
	The Tragedy of India.		.. Sir Reginald Craddock.
	Echoes of Cawnpore		.. Sir Louis Stuart.

BOOKS ON ORDER.

1.	The Official History of the Great War, Military Operations, France and Belgium 1916, Volume V.	.. Sir J. E. Edmonds.
2.	Cohort of the Tropics—A Story of the Great War in Central Africa	.. Owen Letcher.
3.	Outline of the World's Military History	.. Lt.-Col. W. A. Mitchell.
4.	Days and Nights with Big Game	.. Lt.-Genl. Sir A. E. Wardrop.

VI.—Army Examinations.

(*a*) *Promotion.*—The following table shows the campaigns on which the military history papers will be set from March 1932, for lieutenants for promotion to captain in sub-head (*b*) (*iii*) and for captains for promotion to major in sub-head (*d*) (*iii*):—

1	2	3	4	5
Serial No.	Date of examination.	Campaign set for the first time.	Campaign set for the second time.	Campaign set for the last time.
1	March 1932 ..	..	Egypt and Palestine, from the outbreak of the war with Germany to June 1917.	Marlborough's Campaigns, 1702—09.
2	October 1932	Shenandoah Valley Campaign (1861-62).	..	Egypt and Palestine, from the outbreak of the war with Germany to June 1917.
3	March 1933 ..	Egypt and Palestine, as covered by the History of the Great War—Military Operations—Egypt and Palestine, Vols. I and II.	Shenandoah Valley Campaign (1861-62).	..
4	October 1933	..	Egypt and Palestine, as covered by the History of the Great War—Military Operations—Egypt and Palestine, Vols. I and II.	Shenandoah Valley Campaign (1861-62).
5	March 1934 ..	..	..	Egypt and Palestine, as covered by the History of the Great War—Military Operations—Egypt and Palestine, Vols. I and II.

(*b*) *Staff College.*—(See Staff College (Camberley) Regulations, 1930, obtainable from the Central Publication Branch, Calcutta).

The following campaigns have been set for the Staff College Entrance Examination:—

Strategy of—

Napoleon's Campaign of 1796 in Italy.

Waterloo Campaign.

Peninsula Campaign up to and including the Battle of Salamanca.

The strategy and broad tactical lessons of—

The American Civil War.

Russo-Japanese War up to and including the Battle of Liao-Yang.

The Great War in France, Belgium, Mesopotamia, the Dardanelles and Palestine, including a knowledge of the influence on the strategy in these areas of the events in other theatres of the War.

The East Prussian Campaign, 1914.

The strategy and tactics of—

The Palestine Campaign from 9th November 1917 to the end of the War.

The action of the British Expeditionary Force in France and Belgium up to and including the Battle of the Aisne.

The 3rd Afghan War, 1919.

VII.—Books recommended for Staff College and Promotion Examination Students.

The following list of books available in the Library may be found useful for reference by officers studying for Promotion Examinations or entrance to the Staff College. In addition to those enumerated below there is a large number of books in the Library dealing with Military History, Tactics, Organization, Administration, Military Geography, Languages, etc. Should any member require a book not shown in this list he should apply to the Librarian, when it will, if procurable, be forwarded to him.

(The list of books presented and purchased as shown in the Journal should also be consulted).

MILITARY HISTORY.

(Before beginning to read Military History, candidates are advised to study carefully Section 9, Training and Manœuvre Regulations, 1923.)

1.—*The Great War, General History.*

Soldiers and Statesmen (Field-Marshal Sir W. Robertson).

The World Crisis (Winston Churchill).

The Real War (Liddell Hart).

My War Memories (Ludendorff).

General Headquarters, 1914—16, and its Critical Decisions (Falkenhayn).

2.—*The Campaign of the British Army in France and Belgium.*

A.—Official History of the War.

Military Operations, France and Belgium, Vols. I to V.

B.—Other Books.

Forty Days in 1914 (Maurice, new edition).
Ypres, 1914. (An official account) (German General Staff).
Story of the Fourth Army (Montgomery).
The Last Four Months (Maurice).

3.—*The Palestine Campaign.*

A.—Official Accounts.

A Brief Record of the Advance of the Egyptian Expeditionary Force, 1919.

The Official History of the Great War. Military Operations in Egypt and Palestine, Vol. I, and Maps (Lieut.-General Sir G. MacMunn).

The Official History, Operations, Egypt and Palestine, from June 17th to the end of the War, Parts I and II, with maps (Capt. Cyril Falls).

B.—Other Books.

The Revolt in the Desert (T. E. Lawrence).

Outline of the Egyptian and Palestine Campaigns, 1914—18 (Bowman Manifold).

The Palestine Campaign (Colonel A. P. Wavell).

Army Quarterly—January 1922 (Lieut.-Colonel Wavell and C. T. Atkinson's articles).

Cavalry Journal—October 1921 (Lieut.-Colonel Rex Osborne's article)—July 1923 (Lieut.-Colonel Beston's article).

R. U. S. I. Journal—May 1922 (Colonel-Commandant Weir's article).

U. S. I. Journal—October 1923 (Captain Channer's article).

4.—*The Dardanelles Campaign.*

A.—Official Accounts.

Naval and Military Despatches.. A clear account of the operations in detail from the G. H. Q. standpoint.

Reports of the Dardanelles Commission. .. Fixes responsibility for the inception and conduct of the campaign. An interesting study in the relationship between Politicians and Naval and Military Experts.

Despatches from the Dardanelles (Ian Hamilton).

Official History of the Great War, Gallipoli, May 1915, Vol. I, (C. F. Aspinall Oglander).

B.—Other Books.

The Dardanelles (Callwell) ..The best unofficial account and criticism of the strategic conduct of the campaign.

5.—*The Mesopotamia Campaign.*

A.—Official Account.

Official History of the Campaign in Mesopotamia, Vols. I to IV, (F. J. Moberly).

B.—Other Books.

Critical Study of the Campaign in Mesopotamia up to April 1917 (Staff College).

The Campaign in Mesopotamia, 1914—18 (Evans).

A Chapter of Misfortunes.

My Campaign in Mesopotamia (Townshend).

Mesopotamia, 1917—20, A Clash of Loyalties (Sir A. Wilson).

6.—*Waterloo Campaign.*

Wellington and Waterloo (Arthur Griffiths).

Waterloo, the Downfall of the first Napoleon (George Hooper).

Campaign of 1815 (W. H. James).

With Napoleon at Waterloo (E. B. Low).

Waterloo (Ropes).

Campaign of 1815, Ligny: Quatre-Bras: Waterloo (W. O'Connor Morris).

Waterloo Campaign (S. C. Pratt).

Wellington and Waterloo (G. W. Redway).

Wellington's Campaigns. Peninsula-Waterloo, 1808—15, also Moore's.

Campaign of Corunna (C. W. Robinson).

7.—*Marlborough's Campaigns.*

History of the British Army, Vol. I (Hon. J. W. Fortescue).

Life of John, Duke of Marlborough, Vols. I and II (Archibald Alison).

The Wars of Marlborough, 1702—09 (Frank Taylor).

John Churchill, Duke of Marlborough, Vols. I and II (Viscount Wolseley).

Marlborough and the Rise of the British Army (C. T. Atkinson).

A Short Life of Marlborough (H. J. & E. A. Edwards).

The Battle of Blenheim (Hilaire Belloc).

Marlborough and his Campaigns, 1702—1709 (A. Kearsey).

8.—*The American Civil War.*

Stonewall Jackson and the American Civil War (G. F. R. Henderson).

History of the Civil War in the United States, 1861—65 (W. B. Wood and J. E. Edmonds).

History of the Campaign of Gen. T. J. (Stonewall) Jackson in the Shenandoah Valley of Virginia (William Allen).

A Study of the Strategy and Tactics of the Shenandoah Valley Campaign, 1861—1862 (A. Kearsey).

The American Civil War, 1861—64 (John Formby).

History of the American Civil War (J. W. Draper).

Fredericksburg and Chancellorsville (J. E. Gough).

Battles and Leaders of the Civil War (Johnson and Buell).

Robert E. Lee, The Soldier (Maurice).

Sherman (Liddell Hart).

9.—*The East Prussian Campaign.*

Tannenberg—First 30 days in East Prussia (Edmund Ironside).

Out of my Life (Von Hindenburg).

My War Memories (Ludendorff).

10.—*The Russo-Japanese War,* 1904, *up to and including the Battle of Liao-Yang.*

Lectures on the Strategy of the Russo-Japanese War (Bird).

Questions on the Russo-Japanese War (Brunker).

Official Account: The Russo-Japanese War (Naval and Military), 3 Vols., published by Committee of Imperial Defence.

Outline of the Russo-Japanese War (Ross).

A Study of the Russo-Japanese War (Chasseur).

Outline History of the Russo-Japanese War, 1904, up to the Battle of Liao-Yang, with Questions and Answers (P. W.).

An Account of the Battle of Liao-Yang (with questions and 10 maps for examination purposes) (Bird).

11.—*Napoleon's Italian Campaign*, 1796-97.

Napoleon's Campaign in Italy (Burton).

Encyclopædia Britannica.

ORGANIZATION AND ADMINISTRATION.

12.—*Organization of the Army.*

A.—Organization of the Army since 1868.

History of British Army, by Fortescue, Vols. I to XIII.

Outline of the Development of the British Army, by Major-General Sir W. H. Anderson.

B.—Forces of the Empire.

The Annual Army Estimates of Effective and Non-Effective Services (H. M. Stationery Office).

Notes on the Land Forces of the British Dominions, Colonies, Protectorates and Mandated Territories.

The Statesman's Year Book.

Army List.

C.—Foreign Armies.

League of Nations Handbook, Armaments.

War Office Official Handbooks of Foreign Armies.

13.—*Development and Constitution of the British Empire.*

A.—The British Empire.

Encyclopædia Brittannica—(Contains much concentrated information).

The Statesman's Year Book.

Whittaker's Almanack.

The Colonial Office List.

The Government of the British Empire (Jenks, 1923).

The Foundation and Growth of the British Empire (J. A. Williamson, 1918).

The Beginnings of English Overseas Enterprise (C. P. Lucas, 1917).

The Government of England (L. A. Lowell, 1912).
The Expansion of the British Empire (W. H. Woodward, 1927 edition).
The Origin and Growth of the English Colonies and of Their System of Government (H. E. Egerton, 1903).
The English Constitution (Bagehot, 1909).
England in the Seven Years' War (Sir J. Corbett, 1907).

B.—Books on Special Portions of the Empire or World.

The Rise and Expansion of British Dominions in India (Sir A. O. Lyall, 1894).
General Survey of the History of India (Sir Verney Lovett).
India in 1928-29 (J. Coatman).
India in 1929-30 (Bajpai).
Modern Egypt (Cromer, 1908).
Egypt and the Army (Elgood, 1924).
The History of Canada (W. L. Grant).
Report on British North America (Sir C. P. Lucas).
The Union of South Africa (R. H. Brand, 1909).
History of the Australasian Colonies (Jenks, 1912).
The Lost Possessions of England (W. F. Lord, 1896).
International Relations of the Chinese Empire (H. B. Mosse) (Kelly and Walsh, Shanghai).
What's Wrong with China ? (Gilbert).
Why China Sees Red (Putnam-Weale).

MILITARY GEOGRAPHY.

14.—*Military Geography.*

Naval and Military Geography of the British Empire (Dr. Vaughan Cornish, 1916).
Imperial Military Geography (Capt. D. H. Cole).
Imperial Communications (Wakeley).
Imperial Economy (Major R. J. Wilkinson).

TACTICS.

15.—*Tactical Problems.*

Common mistakes in the solution of tactical problems and how to avoid them (Lieut.-Colonel A. B. Beauman, 1926).

Historical illustrations to Field Service Regulations, Vol. II (Major E. G. Eady, 1926).

Elementary Tactics or the Art of War, British School (Major R. P. Pakenham-Walsh, 1927).

VIII.—Schemes.

Efforts are being made to compete with demands for tactical schemes from officers working for the Staff College and Promotion Examinations by introducing as many new schemes as possible. In addition to reprints of several schemes, the Institution is now in possession of the complete set of schemes with solutions set at the 1931 Army Headquarters Staff College Course.

It is obviously impossible for the Secretary to undertake the correction of individual solutions, but all the recent schemes include a suggested solution in the form in which it is considered that the paper should have been answered, with reasons for the solution given.

In order to simplify their issues, the schemes have been classified and numbered as follows.

They can all be obtained by V. P. P., *plus* postage, on application to the Secretary. When ordering members are requested to give the number and subject of the schemes required.

PROMOTION SERIES.

(*A*) *Administrative Exercise, with diagram.* (*Reprinted May*, 1928). To illustrate the supply system of a Division ..Rs. 2.

(*B*) *Tactical Schemes* (*Reprinted May*, 1928), Complete with maps and solutions :—

Lieutenant to Captain.

(*i*) Mountain Warfare .. .. ..Rs. 2-8

(*ii*) Defence and Attack orders .. .. ,, 2-8

Captain to Major.

(*i*) Outposts .. .. ,, 2-8
Defensive position.
Withdrawal.

(*ii*) Tactical exercise without troops .. .. ,, 2-8
Reconnaissance.
Attack orders.

STAFF COLLEGE SERIES.

(*C*) *Tactical Schemes* (*Reprinted May*, 1928). With one map for the three schemes and solutions :—

(*i*) Approach March .. .. ..Rs. 2-8
Reconnaissance before night attack.
Orders for night attack.

(*ii*) Outposts .. .. .. ,, 2-8
Defence.
Action of a force retiring.

(*iii*) Move by M. T. .. .. .. ,, 2-8
Occupation of a defensive position.
Counter-attack.

(*D*) *Army Headquarters Staff College Course Tactical Schemes*—

1928.—Three tactical schemes, complete with maps and solutions ..Rs. 3 each (Re. 1 without maps).

(*i*) Advanced-Guard, Operation Orders and Appreciation.

(*ii*) Withdrawal—Operation Orders.

(*iii*) Rear-Guard, Appreciation and Operation Orders. (Map as for (*i*).)

1929.—Three tactical schemes, complete with maps and solutions ..Rs. 3 each. (Re. 1 without maps).

(*i*) Withdrawal—Appreciation.

(*ii*) Advanced-Guard—Operation Orders with march table. (Map as for (*i*).)

(*iii*) Attack, Appreciation and Operation Orders.

1931.—Strategy and Tactics papers, complete with maps and solutions .. Rs. 3 each. (Re. 1 without maps).

(*i*) Training for War (Protection).

(*ii*) Advanced-Guard and Attack.

(*iii*) Attack, Appreciation and Operation Orders. (Map as for (*i*).)

(*E*) *Mountain Warfare.*

A scheme, with map and solution (Reprinted May 1928) .. .. .. Rs. 2-8

(*F*) *Administrative Exercise, with diagram* (*Reprinted May*, 1928). To illustrate the supply system of a Division .. Rs. 2

(*G*) *Other Schemes and Specimen Examination Papers.*

(*i*) Supply Problem (without maps and solutions) (1930) .. .. ..Re. 1 each.

(*ii*) The History and Organization of the Empire (1931) .. .. ..Re. 1 each.

(*iii*) Organization, Administration and Transportation (Peace), (1931) (with suggested answers), ...Re. 1 each.

(*iv*) Withdrawal (without map), (1931) ..Re. 1 each.

IX.—Precis of Lectures.

A number of precis of lectures delivered to the Army Headquarters Staff College Course is available for members on payment. These precis are sufficiently full to be of great value to those who have not attended the lectures. The date of the precis is given in each case.

(*i*) Night Operations (1931) .. ..Rs. 2/- each.
(*ii*) The East Prussian Campaign, 1914 (1931) .. ,, 1/8 ,,
(*iii*) The Third Afghan War (1931) .. .. ,, 1/8 ,,
(*iv*) The Palestine Campaign, I (1930) .. ,, 1/8 ,,
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(*vi*) Military Evolution, and the Influence of modern inventions on Warfare (1931).. ,, 1/- ,,
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(*viii*) History and Organization of the Empire (1931) ,, 1/- ,,
(*ix*) Hints on working for examinations (1930) .. As.-/8/- ,,
(*x*) The Employment of Artillery (1930) .. ,, -/8/- ,,
(*xi*) Artillery (1931) 1st lecture .. .. ,, -/8/- ,,

(*xi a*) Artillery (1931), 2nd lecture	..	..	As. /8/	each.
(*xii*) Anti-Aircraft Defence (1930)	..	..	,, ,,	,,
(*xiii*) Wireless Communications in the R.A.F. (1931)			,, ,,	,,
(*xiv*) Air Co-operation (1931)	..	..	,, ,,	,,
(*xv*) The Employment of Divisional Cavalry (1930)			,, ,,	,,
(*xvi*) Anti-Gas Defence (1931)	..	..	,, ,,	,,
(*xvii*) Tanks (1930)	..	..	,, ,,	,,
(*xviii*) Armoured Cars (1930)	..	..	,, ,,	,,
(*xix*) Military Engineering (1930)	..	..	,, ,,	,,
(*xx*) Signals in the Division (1930)	..	..	,, ,,	,,
(*xxi*) Mountain Warfare, II (1930)	..	..	,, ,,	,,
(*xxii*) The Organization of the British Army (1930)			,, ,,	,,
(*xxiii*) Mobilization (1930)	..	..	,, ,,	,,
(*xxiv*) Reinforcements (1930)	..	..	,, ,,	,,
(*xxv*) Military Law, I (1930)	..	..	,, ,,	,,
(*xxv a*) Military Law, II (1930)	..	..	,, ,,	,,
(*xxv b*) Military Law, III (1930)	..	..	,, ,,	,,
(*xxvi*) The " Q" Administrative Services in Peace (1930)	..	..	,, ,,	,,
(*xxvii*) The Auxiliary and Indian Territorial Forces (1929)	..	..	,, ,,	,,
(*xxviii*) Training (1930)	..	..	,, -/4/-	,,
Course of five lectures given at the London School of Economics, 1925, on " Transportation in War "	..	..	,, -/12/-	,,

X.—Historical Research.

The U. S. I. is prepared to supply members and units with type-written copies of old Indian Army List pages, at the rate of Rs. 2 per type-written page.

The staff of the Institution is always available to assist units, authors of regimental histories and members by searching the many old military records in the Library on their behalf.

XI.—The MacGregor Memorial Medal.

1. The MacGregor Memorial Medal was founded in 1888 as a memorial to the late Major-General Sir Charles MacGregor. The medals are awarded for the best military reconnaissances or journeys of exploration of the year.

MacGregor Memorial Medal—*concld.*

2. The following awards are made annually in the month of June :—

(*a*) For officers—British or Indian—silver medal.

(*b*) For soldiers—British or Indian—silver medal, with Rs. 100 gratuity.

For especially valuable work a gold medal may be awarded in place of one of the silver medals, or in addition to the silver medals, whenever the administrators of the fund deem it desirable. Also the Council may award a special additional silver medal, without gratuity, to a soldier, for especially good work.

4. The award of medals is made by His Excellency the Commander-in-Chief, as Vice-Patron, and the Council of the United Service Institution who were appointed administrators of the Fund by the MacGregor Memorial Committee.

5. Only officers and soldiers belonging to the Army in India (including those in civil employ) are eligible for the award of the medal.*

6. The medal may be worn in uniform by Indian soldiers on ceremonial parades, suspended round the neck by the ribbon issued with the medal.†

(*i*) Personal risk to life during the reconnaissance or exploration is not a necessary qualification for the award of the medal; but in the event of two journeys being of equal value, the man who has run the greater risk will be considered to have the greater claim to the reward.

(*ii*) When the work of the year has either not been of sufficient value, or has been received too late for consideration before the Council Meeting, the medal may be awarded for any reconnaissance during previous years considered by His Excellency the Commander-in-Chief to deserve it.

MacGregor Memorial Medallists.

(*With rank of officers and soldiers at the date of the Award*).

1889..Bell, Col. M. S., v.c., r.e. (specially awarded a gold medal).

1890..Younghusband, Capt. F. E., King's Dragoon Guards.

*N.B.—The terms "officer" and "soldier" include those serving in the British and Indian armies and their reserves, also those serving in Auxiliary Forces, such as the Indian Auxiliary and Territorial Forces and Corps under Local Governments, Frontier Militia, Levies and Military Police, also all ranks serving in the Indian States Forces.

† Replacements of the ribbon may be obtained on payment from the Secretary, U. S. I., Simla.

MacGregor Memorial Medallists—(*contd.*).

1891..Sawyer, Maj. H. A., 45th Sikhs.
Ramzan Khan, Havildar, 3rd Sikhs.
1892..Vaughan, Capt. H. B., 7th Bengal Infantry.
Jaggat Singh, Havildar, 19th Punjab Infantry.
1893..Bower, Capt. H., 17th Bengal Cavalry (specially awarded a gold medal).
Fazaldad Khan, Dafadar, 17th Bengal Cavalry.
1894..O'Sullivan, Maj. G. H. W., R.E.
Mull Singh, Sowar, 6th Bengal Cavalry.
1895..Davies, Capt. H. R., Oxfordshire Light Infantry.
Ganga Dyal Singh, Havildar, 2nd Rajputs.
1896..Cockerill, Lieut. G. K., 28th Punjab Infantry.
Ghulam Nabi, Sepoy, Q. O. Corps of Guides.
1897..Swayne, Capt. E. J. F., 10th Rajput Infantry.
Shahzad Mir, Dafadar, 11th Bengal Lancers.
1898..Walker, Capt. H. B., Duke of Cornwall's Light Infantry.
Adam Khan, Havildar, Q. O. Corps of Guides.
1899..Douglas, Capt. J. A., 2nd Bengal Lancers.
Mihr Din, Naik, Bengal Sappers and Miners.
1900..Wingate, Capt. A. W. S., 14th Bengal Lancers.
Gurdit Singh, Havildar, 45th Sikhs.
1901..Burton, Maj. E. B., 17th Bengal Lancers.
Sundar Singh, Colour Havildar, 31st Burmah Infantry.
1902..Ray, Capt. M. R. E., 7th Rajput Infantry.
Tilbir Bhandari, Havildar, 9th Gurkha Rifles.
1903..Manifold, Lieut.-Col. C. C., I.M.S.
Ghulam Hussain, Lance-Dafadar, Q.O. Corps of Guides.
1904..Fraser, Capt. L. D., R.G.A.
Moghal Baz, Dafadar, Q. O. Corps of Guides.
1905..Rennick, Maj. F., 40th Pathans (specially awarded a gold medal).
Madho Ram, Havildar, 8th Gurkha Rifles.
1906..Shahzada Ahmad Mir, Risaldar, 36th Jacob's Horse.
Ghafur Shah, Lance-Naik, Q. O. Corps of Guides Infantry.
1907..Nangle, Capt. M. C., 92nd Punjabis.
Sheikh Usman, Havildar, 103rd Mahratta Light Infantry.
1908..Gibbon, Capt. C. M., Royal Irish Fusiliers.
Malang, Havildar, 56th Punjab Rifles.
1909..Muhammad Raza, Havildar, 106th Pioneers.

MacGregor Memorial Medallists—(*contd.*).

1910..Sykes, Maj. P. M., C.M.G., late 2nd Dragoon Guards (specially awarded a gold medal).
Turner, Capt. F. G., R.E.
Khan Bahadur Sher Jung, Survey of India.

1911..Leachman, Capt. G. E., The Royal Sussex Regiment.
Gurmukh Singh, Jemadar, 93rd Burmah Infantry.

1912..Pritchard, Capt. B. E. A., 83rd Wallajahabad Light Infantry (specially awarded a gold medal).
Wilson, Lieut. A. T., C.M.G., 32nd Sikh Pioneers.
Mohibulla, Lance-Dafadar, Q. V. O. Corps of Guides.

1913..Abbay, Capt. B. N., 27th Light Cavalry.
Sirdar Khan, Sowar, 39th (K. G. O.), Central India Horse.
Waratong, Havildar, Burmah Military Police (specially awarded a silver medal).

1914..Bailey, Capt F. M., I.A. (Political Department).
Morshead, Capt. H. T., R.E.
Haidar Ali, Naik, 106th Hazara Pioneers.

1915..Waterfield, Capt. F. C., 45th Rattray's Sikhs.
Ali Juma, Havildar, 106th Hazara Pioneers.

1916..Abdur Rahman, Naik, 21st Punjabis.
Zarghun Shah, Havildar, 58th Rifles (F. F.) (specially awarded a silver medal).

1917..Mian Afraz Gul, Sepoy, Khyber Rifles.

1918..Noel, Capt. E. W. C. (Political Department).

1919..Keeling, Lieut.-Col. E. H., M.C., R.E.
Alla Sa, Jemadar, N. E. Frontier Corps.

1920..Blacker, Capt. L. V. S., Q. V. O. Corps of Guides.
Awal Nur, C. Q. M. Havildar, 2nd Bn., Q. V. O. Corps of Guides. (Special gratuity of Rs. 200.)

1921..Holt, Maj. A. L., Royal Engineers.
Sher Ali, Sepoy No. 4952, 106th Hazara Pioneers.

1922..Abdul Samad Shah, Capt., O.B.E., 31st D.C.O. Lancers.
Nur Muhammad, Lance-Naik, 1st Guides Infantry, F. F.

1923..Bruce, Capt. J. G., 2/6th Gurkha Rifles.
Sohbat, Head Constable, N.-W. F. Police.
Hari Singh Thapa, Survey Department (specially awarded a silver medal).

1924..Rahmat Shah, Havildar, I.D.S.M., N.-W. F. Corps.
Ghulam Hussain, Naik, N.-W. F. Corps.

MACGREGOR MEMORIAL MEDALLISTS—(*concld.*).

1925..SPEAR, Capt. C. R., 5/13th Frontier Force Rifles.
JABBAR KHAN, Naik, 5/13th Frontier Force Rifles.
1926..HARVEY-KELLY, Maj. C. H. G. H., D.S.O., 4/10th Baluch Regiment.
1927..LAKE, Maj. M. C., 4/4th Bombay Grenadiers.
1928..BOWERMAN, Capt. J. F., 4/10th D.C.O. Baluch Regiment.
MUHAMMAD KHAN, Havildar, Zhob Levy Corps.
1929..ABDUL HANAN, Naik, N.-W. F. Corps, (with gratuity of Rs. 100).
GHULAM ALI, Dafadar, Guides Cavalry (specially awarded a silver medal).
1930..GREEN, Capt. J. H., 3/20th Burma Rifles.
1931..O'CONNOR, Capt. R. L., 1/9th Jat Regiment.
KHIAL BADSHAH, Naik, 1/13th Frontier Force Rifles.

UNITED SERVICE INSTITUTION OF INDIA.

PRIZE ESSAY GOLD MEDALLISTS.

(*With Rank of Officers at the date of the Essay*).

1872..ROBERTS, Lieut.-Col. F. S., V.C., C.B., R.A.
1873..COLQUHOUN, Capt. J. S., R.A.
1874..COLQUHOUN, Capt. J. S., R.A.
1879..ST. JOHN, Maj. O. B. C., R.E.
1880..BARROW, Lieut. E. G., 7th Bengal Infantry.
1882..MASON, Lieut. A. H., R.E.
1883..COLLEN, Maj. E. H. H., S.C.
1884..BARROW, Capt. E. G., 7th Bengal Infantry.
1887..YATE, Lieut. A. C., 27th Baluch Infantry.
1888..MAUDE, Capt. F. N., R.E.
YOUNG, Maj. G. F., 24th Punjab Infantry (specially awarded a silver medal).
1889..DUFF, Capt. B., 9th Bengal Infantry.
1890..MAGUIRE, Capt. C. M., 2nd Cavy., Hyderabad Contingent.
1891..CARDEW, Lieut. F. G., 10th Bengal Lancers.
1893..BULLOCK, Maj. G. M., Devonshire Regiment.
1894..CARTER, Capt. F. C., Northumberland Fusiliers.
1895..NEVILLE, Lieut.-Col. J. P. C., 14th Bengal Lancers.
1896..BINGLEY, Capt. A. H., 7th Bengal Infantry.

PRIZE ESSAY GOLD MEDALLISTS—(*concld.*).

1897..NAPIER, Capt. G. S. F., Oxfordshire Light Infantry.
1898..MULLALY, Maj. H., R.E.

CLAY, Capt. C. H., 43rd Gurkha Rifles (specially awarded a silver medal).

1899..NEVILLE, Col. J. P. C., S.C.
1900..THUILLIER, Capt. H. F., R.E.

LUBBOCK, Capt. G., R.E. (specially awarded a silver medal).

1901..RANKEN, Lieut.-Col. G. P. P., 46th Punjab Infantry.
1902..TURNER, Capt. H. H. F., 2nd Bengal Lancers.
1903..HAMILTON, Maj. W. G., D.S.O., Norfolk Regiment.

BOND, Capt. R. F. G., R.E. (specially awarded a silver medal).

1904..MACMUNN, Maj. G. F., D.S.O., R.F.A.
1905..COCKERILL, Maj. G. K., Royal Warwickshire Regiment.
1907..WOOD, Maj. E. J. M., 99th Deccan Infantry.
1908..JEUDWINE, Maj. H. S., R.A.
1909..MOLYNEUX, Maj. E. M. J., D.S.O., 12th Cavalry.

ELSMIE, Maj. A. M. S., 56th Rifles, F. F. (specially awarded a silver medal).

1911..Mr.D. PETRIE, M.A., Punjab Police.
1912..CARTER, Maj. B. C., The King's Regiment.
1913..THOMSON, Maj. A. G., 58th Vaughan's Rifles (F. F.).
1914..BAINBRIDGE, Lieut.-Col. W. F., D.S.O., 51st Sikhs (F. F.).

NORMAN, Maj. C. L., M.V.O., Q. V. O. Corps of Guides (specially awarded a silver medal).

1916..CRUM, Maj. W. E., V.D., Calcutta Light Horse.
1917..BLAKER, Maj. W. F., R.F.A.
1918..GOMPERTZ, Capt. A. V., M.C., R.E.
1919..GOMPERTZ, Capt. M. L. A., 108th Infantry.
1920..KEEN, Lt.-Col. F. S., D.S.O., 2/15th Sikhs.
1922..MARTIN, Maj. H. G., D.S.O., O.B.E., R.F.A.
1923..KEEN, Col. F. S., D.S.O., I.A.
1926..DENNYS, Maj. L. E., M.C., 4/12th Frontier Force Regiment.
1927..HOGG, Maj. D. McA., M.C., R.E.
1928..FRANKS, Maj. K. F., D.S.O., 5th Royal Mahrattas.
1929..DENNYS, Maj. L. E., M.C., 4/12th Frontier Force Regiment.
1930..DURNFORD, Maj. C. M. P., 4/6th Rajputana Rifles.
1931..FORD, Lt.-Col. G. N., 2/5th Mahratta Light Infantry.

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(From an officer who succeeded in gaining admission to the Staff College at the 1931 Examination).

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United Service Institution of India.

APRIL 1932.

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I.—New Members.

The following new members joined the Institution from 1st December 1931 to 29th February 1932 :—

ORDINARY MEMBERS.

Lt.-Colonel J. M. Brickman.

Major P. R. Quayle.

Captain J. L. Jones.

,, S. S. Lavender.

,, M. E. S. Laws, M.C.

,, P. L. MacDermott.

,, C. Mearns.

Lieut. A. G. Drake-Brockman.

,, H. Butterworth.

,, G. E. Cave.

,, G. W. F. Stewart

,, R. C. B. Waller.

2/Lieut. A. R. Hewson.

II.—The Journal.

The Institution publishes a Quarterly Journal in the months of January, April, July and October, which is issued postage free to members in any part of the world.

Non-members may obtain the Journal at Rs. 2 annas 8 per number, or Rs. 10 per annum. Advertisement rates may be obtained on application to the Secretary.

III.—Contributions to the Journal.

Members and the public are invited to contribute articles to the Journal of the Institution. Articles may vary in length from two thousand to ten thousand words. Payment is made at from Rs. 30

to Rs. 100 in accordance with the value and length of the contribution. Payment is made on publication.

Articles submitted for publication must be typed in *duplicate*, on one side of the paper only. Drawings, plans, maps, etc., for reproduction should be in *jet* black. No washes or ribands of colour should on any account be used. If it is absolutely necessary to use colours (and these are only permissible in line work or names) the following will reproduce photographically, *i.e.*, dark red, dark orange, dark green. No other colour should on any account be used.

With reference to Regulations for the Army in India, paragraph 204 and King's Regulations, paragraph 522, action to obtain the sanction of His Excellency the Commander-in-Chief to the publication of any article in the Journal of the United Service Institution of India will be taken by the Executive Committee of the Institution.

Anonymous contributions under a *nom-de-plume* will not be accepted or acknowledged; all contributions must be sent to the Secretary under the name of the writer and the paper will, if accepted, be published under that name unless a wish is expressed for it to be published under a *nom-de-plume*. The Executive Committee will decide whether the wish can be complied with.

The Committee reserve to themselves the right of omitting any matter which they consider objectionable, and do not undertake to authorise the publication of such papers as are accepted in the order in which they may have been received.

Manuscripts of original papers sent for publication in the Journal will not be returned to the contributor unless he expresses a wish to have them back and pays the postage.

Articles are only accepted on these conditions.

Contributors will be supplied with three copies of their paper *gratis*, if published.

IV.—Reading Room and Library.

The United Service Institution of India is situated in the Mall, Simla, and is open all the year round—including Sundays—from 9 A.M. until sunset.

The Reading Room of the Institution is provided with most of the leading illustrated papers, newspapers, magazines, and journals of military interest that are published. Papers, magazines, "works

of reference" or books marked "Not to be Taken Away," or noted as "Confidential," may not be removed from the Reading Room.

There is a well-stocked library in the Institution, from which members can obtain books on loan free, in accordance with the following rules:—

(1) The Library is only open to members and honorary members of the United Service Institution of India. Members and requested to look upon books as not transferable to their friends.

(2) No book shall be taken from the Library without making the necessary entry in the register. Members residing permanently or temporarily in Simla are requested to enter their addresses.

(3) The United Service Institution of India is open all the year round—including Sundays—from 9 A.M. until sunset. Books may be taken out at any time provided Rule 2 is complied with.

(4) A member shall not be allowed at one time, more than three books or sets of books.

(5) Papers, magazines, "works of reference" or books marked "Not to be Taken Away," or noted as "Confidential," may not be removed.

(6) No particular limit is set as to the number of days for which a member in Simla may keep a book, the Council being desirous of making the Library as useful as possible to members; but if after the expiration of a fortnight from date of issue it is required by any other member it will be re-called.

(7) Applications for books from members at out-stations are dealt with as early as possible, and books are despatched per Registered Parcel Post. They must be returned carefully packed per Registered Parcel Post within one month of date of issue.

(8) If a book is not returned at the end of one month, it must be paid for without the option of return, if so required by the Executive Committee.

(9) Lost and defaced books shall be replaced at the cost of the member to whom they were issued. In the case of lost books which are out of print the value shall be fixed by the Executive Committee, and the amount, when received, spent in the purchase of a new book.

(10) The issue of a book under these rules to any member implies the latter's compliance with the rules, and the willingness to have them enforced, if necessary, against him.

(11) A list of all books presented and purchased, and also a list of books useful to members studying for the Staff College and Promotion Examinations, will be found under Secretary's Notes in the quarterly issue of the U. S. I. Journal.

(12) Members are invited to contribute presents of books, maps and photographs of naval and military interest. These may be addressed to the Secretary, U. S. I. of India, Simla. They will be duly acknowledged.

(13) The catalogue of the Library is completed to 31st March 1924. Price Rs. 3-8-0 or postage paid Rs. 3-14-0. An addendum completed up to 30th September 1927 is available. Price annas 8 *plus* postage annas 4.

V.—New Books.

Books Presented.

Title.	*Published.*	*Author.*
The Punjab Administration Report, 1929-30.	.. 1931 ..	Official.
The Land System of the Holkar State (Presented by the Oxford University Press, Bombay.)	.. ..	C. U. Wells.
Jane's All the World's Aircraft (Presented by Sampson Low, Marston & Coy., Ltd., London.)	.. 1931 ..	G. G. Grey.

Books Purchased.

England's Crisis	.. 1931 ..	Andre Siegfried.
Days & Nights with Big Indian Game	.. 1923 ..	Maj.-Genl. A. E. Wardrop.
The Romance of the Indian Frontier	.. 1931 ..	Sir George MacMunn,

BOOKS PURCHASED.

Title.	*Published.*	*Author.*
Some Economic Consequences of the Great War.	1930	A. L. Bowley.
The Commerce of Nations, 9th edition, revised.	1923	C. F. Bastable & T. E. Gregory.
International Trade	1928	F. W. Taussing.
The Letters of Gertrude Bell		Lady Bell.
Whittaker's Almanack	1931	
Cohart of the Tropics—A Story of the War in Central Africa.	1930	Owen Letcher.
Modern India—A Co-Operative Survey.	1931	Sir John Cumming.
The Official History of the War, Operations in France and Belgium 1916, Vol. V, with maps.	1932	Brig.-Genl. Sir J. E. Edmonds.
Hindenburg, Peace—War—Aftermath.	1931	G. Schultze-Pfaelzer.

BOOKS ON ORDER.

Outline of the World's Military History	Lt.-Col. W. A. Mitchell.
The Duke—Wellington	P. Guedalla.
Six British Battles	Hilaire Belloc.
Behind the Scenes of International Finance	Paul Einzig.

VI.—Army Examinations.

(*a*) *Promotion.*—The following table shows the campaigns on which the military history papers will be set from October 1932, for lieutenants for promotion to captain in sub-head (*b*) (*iii*) and for captains for promotion to major in sub-head (*d*) (*iii*):—

1	2	3	4	5
Serial No.	Date of examination.	Campaign set for the first time.	Campaign set for the second time.	Campaign set for the last time.
1	October 1932	Shenandoah Valley Campaign (1861-62).	..	Egypt and Palestine, from the outbreak of the war with Germany to June 1917.
2	March 1933 ..	Egypt and Palestine, as covered by the History of the Great War—Military Operations—Egypt and Palestine, Vols. I and II.	Shenandoah Valley Campaign (1861-62).	..
3	October 1933	..	Egypt and Palestine, as covered by the History of the Great War—Military Operations—Egypt and Palestine, Vols. I and II.	Shenandoah Valley Campaign (1861-62).
4	March 1934 ..	..	France and Belgium, 1914 up to and including the Aisne.	Egypt and Palestine, as covered by the History of the Great War—Military Operations—Egypt and Palestine, Vols. I and II.
5	October 1934	Mesopotamia, up to and including the capture of Kut-al-Amara, October 1915.	France and Belgium, 1914, up to and including the Aisne.	..
6	March 1935 ..	..	Mesopotamia, up to and including the capture of Kut-al-Amara, October 1915.	France and Belgium, 1914, up to and including the Aisne.
7	October 1935	..	..	Mesopotamia, up to and including the capture of Kut-al-Amara, October 1915.

(*b*) *Staff College.*—(See Staff College (Camberley) Regulations 1930, obtainable from the Central Publication Branch, Calcutta).

The following campaigns have been set for the Staff College Entrance Examination :—

Strategy of—

Napoleon's Campaign of 1796 in Italy.

Waterloo Campaign.

Peninsula Campaign up to and including the Battle of Salamanca.

The strategy and broad tactical lessons of—

The American Civil War.

Russo-Japanese War up to and including the Battle of Liao-Yang.

The Great War in France, Belgium, Mesopotamia, the Dardanelles and Palestine, including a knowledge of the influence on the strategy in these areas of the events in other theatres of the War.

The East Prussian Campaign, 1914.

The strategy and tactics of—

The Palestine Campaign from 9th November 1917 to the end of the War.

The action of the British Expeditionary Force in France and Belgium up to and including the Battle of the Aisne.

The 3rd Afghan War, 1919.

VII.—Books recommended for Staff College and Promotion Examination Students.

The following list of books available in the Library may be found useful for reference by officers studying for Promotion Examinations or entrance to the Staff College. In addition to those enumerated

below there is a large number of books in the Library dealing with Military History, Tactics, Organization, Administration, Military Geography, Languages, etc. Should any member require a book not shown in this list he should apply to the Librarian, when it will, if procurable, be forwarded to him.

(The list of books presented and purchased as shown in the Journal should also be consulted).

MILITARY HISTORY.

(Before beginning to read Military History, candidates are advised to study carefully Section 9, Training and Manœuvre Regulations, 1923.)

1.—*The Great War, General History.*

Soldiers and Statesmen (Field-Marshal Sir W. Robertson).

The World Crisis (Winston Churchill).

The Real War (Liddell Hart).

My War Memories (Ludendorff).

General Headquarters, 1914—16, and its Critical Decisions (Falkenhayn).

2.—*The Campaign of the British Army in France and Belgium.*

A.—Official History of the War.

Military Operations, France and Belgium, Vols. I to V.

B.—Other Books.

Forty Days in 1914 (Maurice, new edition).

Ypres, 1914. (An official account) (German General Staff).

Story of the Fourth Army (Montgomery).

The Last Four Months (Maurice).

3.—*The Palestine Campaign.*

A.—Official Accounts.

A Brief Record of the Advance of the Egyptian Expeditionary Force, 1919.

The Official History of the Great War. Military Operations in Egypt and Palestine, Vol. I, and Maps (Lieut.-General Sir G. MacMunn).

The Official History, Operations, Egypt and Palestine, from June 17th to the end of the War, Parts I and II, with maps (Capt. Cyril Falls).

B.—Other Books.

The Revolt in the Desert (T. E. Lawrence).

Outline of the Egyptian and Palestine Campaigns, 1914—18 (Bowman Manifold).

The Palestine Campaign (Colonel A. P. Wavell).

Army Quarterly—January 1922 (Lieut.-Colonel Wavell and C. T. Atkinson's articles).

Cavalry Journal—October 1921 (Lieut.-Colonel Rex Osborne's article)—July 1923 (Lieut.-Colonel Beston's article).

R. U. S. I. Journal—May 1922 (Colonel-Commandant Weir's article).

U. S. I. Journal—October 1923 (Captain Channer's article).

4.—*The Dardanelles Campaign.*

A.—Official Accounts.

Naval and Military Despatches . . A clear account of the operations in detail from the G. H. Q. standpoint.

Reports of the Dardanelles Commission. . . Fixes responsibility for the inception and conduct of the campaign. An interesting study in the relationship between Politicians and Naval and Military Experts.

Despatches from the Dardanelles (Ian Hamilton).

Official History of the Great War, Gallipoli, May 1915, Vol. I, (C. F. Aspinall Oglander).

B.—Other Books.

The Dardanelles (Callwell) ..The best unofficial account and criticism of the strategic conduct of the campaign.

5.—*The Mesopotamia Campaign.*

A.—Official Account.

Official History of the Campaign in Mesopotamia, Vols. I to IV, (F. J. Moberly).

B.—Other Books.

Critical Study of the Campaign in Mesopotamia up to April 1917 (Staff College).

The Campaign in Mesopotamia, 1914—18 (Evans).

A Chapter of Misfortunes.

My Campaign in Mesopotamia (Townshend).

Mesopotamia, 1917—20, A Clash of Loyalties (Sir A. Wilson).

6.—*Waterloo Campaign.*

Wellington and Waterloo (Arthur Griffiths).

Waterloo, the Downfall of the first Napoleon (George Hooper).

Campaign of 1815 (W. H. James).

With Napoleon at Waterloo (E. B. Low).

Waterloo (Ropes).

Campaign of 1815, Ligny: Quatre-Bras: Waterloo (W. O'Connor Morris).

Waterloo Campaign (S. C. Pratt).

Wellington and Waterloo (G. W. Redway).

Wellington's Campaigns. Peninsula-Waterloo, 1808—15, also Moore's.

Campaign of Corunna (C. W. Robinson).

7.—*Marlborough's Campaigns.*

History of the British Army, Vol. I (Hon. J. W. Fortescue).

Life of John, Duke of Marlborough, Vols. I and II (Archibald Alison).

The Wars of Marlborough, 1702—09 (Frank Taylor).

John Churchill, Duke of Marlborough, Vols. I and II (Viscount Wolseley).

Marlborough and the Rise of the British Army (C. T. Atkinson).

A Short Life of Marlborough (H. J. & E. A. Edwards).

The Battle of Blenheim (Hilaire Belloc).

Marlborough and his Campaigns, 1702—1709 (A. Kearsey).

8.—*The American Civil War.*

Stonewall Jackson and the American Civil War (G. F. R. Henderson).

History of the Civil War in the United States, 1861—65 (W. B. Wood and J. E. Edmonds).

History of the Campaign of Gen. T. J. (Stonewall) Jackson in the Shenandoah Valley of Virginia (William Allen).

A Study of the Strategy and Tactics of the Shenandoah Valley Campaign, 1861-1862 (A. Kearsey).

The American Civil War, 1861—64 (John Formby).

History of the American Civil War (J. W. Draper).

Fredericksburg and Chancellorsville (J. E. Gough).

Battles and Leaders of the Civil War (Johnson and Buell).

Robert E. Lee, The Soldier (Maurice).

Sherman (Liddell Hart).

9.—*The East Prussian Campaign.*

Tamenberg—First 30 days in East Prussia (Edmund Ironside).

Out of my Life (Von Hindenburg).

My War Memories (Ludendorff).

10.—*The Russo-Japanese War*, 1904, *up to and including the Battle of Liao-Yang.*

Lectures on the Strategy of the Russo-Japanese War (Bird).

Questions on the Russo-Japanese War (Brunker).

Official Account: The Russo-Japanese War (Naval and Military), 3 Vols., published by Committee of Imperial Defence.

Outline of the Russo-Japanese War (Ross).

A Study of the Russo-Japanese War (Chasseur).

Outline History of the Russo-Japanese War, 1904, up to the Battle of Liao-Yang, with Questions and Answers (P. W.).

An Account of the Battle of Liao-Yang (with questions and 10 maps for examination purposes) (Bird).

11.—*Napoleon's Italian Campaign*, 1796-97.

Napoleon's Campaign in Italy (Burton).

Encyclopædia Britannica.

ORGANIZATION AND ADMINISTRATION.

12.—*Organization of the Army.*

A.—Organization of the Army since 1868.

History of British Army, by Fortescue, Vols. I to XIII.

Outline of the Development of the British Army, by Major-General Sir W. H. Anderson.

B. —Forces of the Empire.

The Annual Army Estimates of Effective and Non-Effective Services (H. M. Stationery Office).

Notes on the Land Forces of the British Dominions, Colonies, Protectorates and Mandated Territories.

The Statesman's Year Book.

Army List.

C.—Foreign Armies.

League of Nations Handbook, Armaments.

War Office Official Handbooks of Foreign Armies.

13.—*Development and Constitution of the British Empire.*

A.—The British Empire.

Encyclopædia Britannica—(Contains much concentrated information).

The Statesman's Year Book.

Whitaker's Almanack.

The Colonial Office List.

The Government of the British Empire (Jenks, 1923).

The Foundation and Growth of the British Empire (J. A. Williamson, 1918).

The Beginnings of English Overseas Enterprise (C. P. Lucas, 1917).

The Government of England (L. A. Lowell, 1912).

The Expansion of the British Empire (W. H. Woodward, 1927 edition).

The Origin and Growth of the English Colonies and of Their System of Government (H. E. Egerton, 1903).

The English Constitution (Bagehot, 1909).

England in the Seven Years' War (Sir J. Corbett, 1907).

B.—Books on Special Portions of the Empire or World.

The Rise and Expansion of British Dominions in India (Sir A. O. Lyall, 1894).

General Survey of the History of India (Sir Verney Lovett).

India in 1928-29 (J. Coatman).

India in 1929-30 (Bajpai).

Modern Egypt (Cromer, 1908).

Egypt and the Army (Elgood, 1924).

The History of Canada (W. L. Grant).

Report on British North America (Sir C. P. Lucas).

The Union of South Africa (R. H. Brand, 1909).

History of the Australasian Colonies (Jenks, 1912).

The Lost Possessions of England (W. F. Lord, 1896).

International Relations of the Chinese Empire (H. B. Mosse) (Kelly and Walsh, Shanghai).

What's Wrong with China ? (Gilbert).

Why China Sees Red (Putnam-Weale).

MILITARY GEOGRAPHY.

14.—*Military Geography.*

Naval and Military Geography of the British Empire (Dr. Vaughan Cornish, 1916).

Imperial Military Geography (Capt. D. H. Cole).

Imperial Communications (Wakeley).

Imperial Economy (Major R. J. Wilkinson).

TACTICS.

15.—*Tactical Problems.*

Common mistakes in the solution of tactical problems and how to avoid them (Lieut.-Colonel A. B. Beauman, 1926).

Historical illustrations to Field Service Regulations, Vol. II (Major E. G. Eady, 1926).

Elementary Tactics or the Art of War, British School (Major R. P. Pakenham-Walsh, 1927).

VIII.—Schemes.

Efforts are being made to compete with demands for tactical schemes from officers working for the Staff College and Promotion Examinations by introducing as many new schemes as possible. In addition to reprints of several schemes, the Institution is now in possession of the complete set of schemes with solutions set at the 1931 Army Headquarters Staff College Course.

It is obviously impossible for the Secretary to undertake the correction of individual solutions, but all the recent schemes include a suggested solution in the form in which it is considered that the paper should have been answered, with reasons for the solution given.

In order to simplify their issues, the schemes have been classified and numbered as follows.

They can all be obtained by V. P. P., *plus* postage, on application to the Secretary. When ordering members are requested to give the number and subject of the schemes required.

PROMOTION SERIES.

(*A*) *Administrative Exercise, with diagram.* (*Reprinted May*, 1928).
To illustrate the supply system of a Division .. Rs. 2.

(*B*) *Tactical Schemes* (*Reprinted May*, 1928), Complete with maps and solutions :—

Lieutenant to Captain.

(*i*) Mountain Warfare .. .. .. Rs. 2-8

(*ii*) Defence and Attack orders .. .. „ 2-8

Captain to Major.

(*i*) Outposts .. .. „ 2-8
Defensive position.
Withdrawal.

(*ii*) Tactical exercise without troops .. .. „ 2-8
Reconnaissance.
Attack orders.

STAFF COLLEGE SERIES.

(*C*) *Tactical Schemes* (*Reprinted May*, 1928). With one map for the three schemes and solutions :—

(*i*) Approach March .. .. ..Rs. 2-8
Reconnaissance before night attack.
Orders for night attack.

(*ii*) Outposts .. .. .. ,, 2-8
Defence.
Action of a force retiring.

(*iii*) Move by M. T. .. .. .. ,, 2-8
Occupation of a defensive position.
Counter-attack.

(*D*) *Army Headquarters Staff College Course Tactical Schemes*—

1928.—Three tactical schemes, complete with maps and solutions ..Rs. 3 each (Re. 1 without maps).

(*i*) Advanced-Guard, Operation Orders and Appreciation.

(*ii*) Withdrawal—Operation Orders.

(*iii*) Rear-Guard, Appreciation and Operation Orders. (Map as for (*i*).)

1929.—Three tactical schemes, complete with maps and solutions ..Rs. 3 each. (Re. 1 without maps).

(*i*) Withdrawal—Appreciation.

(*ii*) Advanced-Guard—Operation Orders with march table. (Map as for (*i*).)

(*iii*) Attack, Appreciation and Operation Orders.

1931.—Strategy and Tactics papers, complete with maps and solutions .. Rs. 3 each. (Re. 1 without maps).

(*i*) Training for War (Protection).

(*ii*) Advanced Guard and Attack.

(*iii*) Attack, Appreciation and Operation Orders. (Map as for (*i*).)

(*E*) *Mountain Warfare.*

A scheme, with map and solution (Reprinted May, 1928) .. .. .. Rs. 2-8

(*F*) *Administrative Exercise, with diagram (Reprinted May,* 1928). To illustrate the supply system of a Division .. Rs. 2

(*G*) *Other Schemes and Specimen Examination Papers.*

(*i*) Supply Problem (without maps and solutions) (1930) .. .. ..Re. 1 each.

(*ii*) The History and Organization of the Empire (1931) .. .. ..Re. 1 each.

(*iii*) Organization, Administration and Transportation (Peace), (1931) (with suggested answers) .. .. ..Re. 1 each.

(*iv*) Withdrawal (without map), (1931) ..Re. 1 each.

IX.—Precis of Lectures.

A number of précis of lectures delivered to the Army Headquarters Staff College Course is available for members on payment. These précis are sufficiently full to be of great value to those who have not attended the lectures. The date of the précis is given in each case.

(*i*) Night Operations (1931) .. ..Rs. 2/- each.

(*ii*) The East Prussian Campaign, 1914 (1931) .. Re. 1/8 ,,

(*iii*) The Third Afghan War (1931) .. .. ,, 1/8 ,,

(*iv*) The Palestine Campaign, I (1930) .. ,, 1/8 ,,

(*iv-a*) The Palestine Campaign, II (1930) .. ,, 1/8 ,,

(*v*) American Civil War (1930) .. .. ,, 1/- ,,

(*vi*) Military Evolution, and the Influence of modern inventions on Warfare (1931).. ,, 1/- ,,

(*vii*) Supply of a Division in War (1930) .. ,, 1/- ,,

(*viii*) History and Organization of the Empire (1931) ,, 1/- ,,

(*ix*) Hints on working for examinations (1930) .. As.-/8/- ,,

(*x*) The Employment of Artillery (1930) .. ,, -/8/- ,,

(*xi*) Artillery (1931) 1st lecture .. .. ,, -/8/- ,,

(*xi-a*)	Artillery (1931), 2nd lecture	As. /8/ each.
(*xii*)	Anti-Aircraft Defence (1930)	,, ,, ,,
(*xiii*)	Wireless Communications in the R.A.F. (1931)	,, ,, ,,
(*xiv*)	Air Co-operation (1931)	,, ,, ,,
(*xv*)	The Employment of Divisional Cavalry (1930)	,, ,, ,,
(*xvi*)	Anti-Gas Defence (1931)	,, ,, ,,
(*xvii*)	Tanks (1930)	,, ,, ,,
(*xviii*)	Armoured Cars (1930)	,, ,, ,,
(*xix*)	Military Engineering (1930)	,, ,, ,,
(*xx*)	Signals in the Division (1930)	,, ,, ,,
(*xxi*)	Mountain Warfare, II (1930)	,, ,, ,,
(*xxii*)	The Organization of the British Army (1930)	,, ,, ,,
(*xxiii*)	Mobilization (1930)	,, ,, ,,
(*xxiv*)	Reinforcements (1930)	,, ,, ,,
(*xxv*)	Military Law, I (1930)	,, ,, ,,
(*xxv-a*)	Military Law, II (1930)	,, ,, ,,
(*xxv-b*)	Military Law, III (1930)	,, ,, ,,
(*xxvi*)	The " Q" Administrative Services in Peace (1930)	,, ,, ,,
(*xxvii*)	The Auxiliary and Indian Territorial Forces (1929)	,, ,, ,,
(*xxviii*)	Training (1930)	,, -/4/- ,,
	Course of five lectures given at the London School of Economics, 1925, on " Transportation in War "	,, -/12/- ,,

X.—Historical Research.

The U. S. I. is prepared to supply members and units with type-written copies of old Indian Army List pages, at the rate of Rs. 2 per type-written page.

The staff of the Institution is always available to assist units, authors of regimental histories and members by searching the many old military records in the Library on their behalf.

XI.—The MacGregor Memorial Medal.

1. The MacGregor Memorial Medal was founded in 1888 as a memorial to the late Major-General Sir Charles MacGregor. The medals are awarded for the best military reconnaissances or journeys of exploration of the year.

MacGregor Memorial Medal—*concld.*

2. The following awards are made annually in the month of June :—

(*a*) For officers—British or Indian—silver medal.

(*b*) For soldiers—British or Indian—silver medal, with Rs. 100 gratuity.

3. For especially valuable work a gold medal may be awarded in place of one of the silver medals, or in addition to the silver medals, whenever the administrators of the fund deem it desirable. Also the Council may award a special additional silver medal, without gratuity, to a soldier, for especially good work.

4. The award of medals is made by His Excellency the Commander-in-Chief, as Vice-Patron, and the Council of the United Service Institution who were appointed administrators of the Fund by the MacGregor Memorial Committee.

5. Only officers and soldiers belonging to the Army in India (including those in civil employ) are eligible for the award of the medal.*

6. The medal may be worn in uniform by Indian soldiers on ceremonial parades, suspended round the neck by the ribbon issued with the medal.†

(*i*) Personal risk to life during the reconnaissance or exploration is not a necessary qualification for the award of the medal; but in the event of two journeys being of equal value, the man who has run the greater risk will be considered to have the greater claim to the reward.

(*ii*) When the work of the year has either not been of sufficient value, or has been received too late for consideration before the Council Meeting, the medal may be awarded for any reconnaissance during previous years considered by His Excellency the Commander-in-Chief to deserve it.

MacGregor Memorial Medallists.

(*With rank of officers and soldiers at the date of the Award*).

1889. .Bell, Col. M. S., v.c., r.e. (specially awarded a gold medal).

1890. .Younghusband, Capt. F. E., King's Dragoon Guards.

*N.B.—The terms "officer" and "soldier" include those serving in the British and Indian armies and their reserves, also those serving in Auxiliary Forces, such as the Indian Auxiliary and Territorial Forces and Corps under Local Governments, Frontier Militia, Levies and Military Police, also all ranks serving in the Indian States Forces.

† Replacements of the ribbon may be obtained on payment from the Secretary, U. S. I., Simla.

MacGregor Memorial Medallists—(*contd.*).

1891..Sawyer, Maj. H. A., 45th Sikhs.
Ramzan Khan, Havildar, 3rd Sikhs.

1892..Vaughan, Capt. H. B., 7th Bengal Infantry.
Jaggat Singh, Havildar, 19th Punjab Infantry.

1893..Bower, Capt. H., 17th Bengal Cavalry (specially awarded a gold medal).
Fazaldad Khan, Dafadar, 17th Bengal Cavalry.

1894..O'Sullivan, Maj. G. H. W., R.E.
Mull Singh, Sowar, 6th Bengal Cavalry.

1895..Davies, Capt. H. R., Oxfordshire Light Infantry.
Ganga Dyal Singh, Havildar, 2nd Rajputs.

1896..Cockerill, Lieut. G. K., 28th Punjab Infantry.
Ghulam Nabi, Sepoy, Q. O. Corps of Guides.

1897..Swayne, Capt. E. J. F., 10th Rajput Infantry.
Shahzad Mir, Dafadar, 11th Bengal Lancers.

1898..Walker, Capt. H. B., Duke of Cornwall's Light Infantry.
Adam Khan, Havildar, Q. O. Corps of Guides.

1899..Douglas, Capt. J. A., 2nd Bengal Lancers.
Mihr Din, Naik, Bengal Sappers and Miners.

1900..Wingate, Capt. A. W. S., 14th Bengal Lancers.
Gurdit Singh, Havildar, 45th Sikhs.

1901..Burton, Maj. E. B., 17th Bengal Lancers.
Sundar Singh, Colour Havildar, 31st Burmah Infantry.

1902..Ray, Capt. M. R. E., 7th Rajput Infantry.
Tilbir Bhandari, Havildar, 9th Gurkha Rifles.

1903..Manifold, Lieut.-Col. C. C., I.M.S.
Ghulam Hussain, Lance-Dafadar, Q. O. Corps of Guides.

1904..Fraser, Capt. L. D., R.G.A.
Moghal Baz, Dafadar, Q. O. Corps of Guides.

1905..Rennick, Maj. F., 40th Pathans (specially awarded a gold medal).
Madho Ram, Havildar, 8th Gurkha Rifles.

1906..Shahzada Ahmad Mir, Risaldar, 36th Jacob's Horse.
Ghafur Shah, Lance-Naik, Q. O. Corps of Guides Infantry.

1907..Nangle, Capt. M. C., 92nd Punjabis.
Sheikh Usman, Havildar, 103rd Mahratta Light Infantry.

1908..Gibbon, Capt. C. M., Royal Irish Fusiliers.
Malang, Havildar, 56th Punjab Rifles.

1909..Muhammad Raza, Havildar, 106th Pioneers.

MacGregor Memorial Medallists—(*contd.*).

1910..Sykes, Maj. P. M., C.M.G., late 2nd Dragoon Guards (specially awarded a gold medal).
Turner, Capt. F. G., R.E.
Khan Bahadur Sher Jung, Survey of India.

1911..Leachman, Capt. G. E., The Royal Sussex Regiment.
Gurmukh Singh, Jemadar, 93rd Burmah Infantry.

1912..Pritchard, Capt. B. E. A., 83rd Wallajahabad Light Infantry (specially awarded a gold medal).
Wilson, Lieut. A. T., C.M.G., 32nd Sikh Pioneers.
Mohibulla, Lance-Dafadar, Q. V. O. Corps of Guides.

1913..Abbay, Capt. B. N., 27th Light Cavalry.
Sirdar Khan, Sowar, 39th (K. G. O.), Central India Horse.
Waratong, Havildar, Burmah Military Police (specially awarded a silver medal).

1914..Bailey, Capt F. M., I.A. (Political Department).
Morshead, Capt. H. T., R.E.
Haidar Ali, Naik, 106th Hazara Pioneers.

1915..Waterfield, Capt. F. C., 45th Rattray's Sikhs.
Ali Juma, Havildar, 106th Hazara Pioneers.

1916..Abdur Rahman, Naik, 21st Punjabis.
Zarghun Shah, Havildar, 58th Rifles (F. F.) (specially awarded a silver medal).

1917..Mian Afraz Gul, Sepoy, Khyber Rifles.

1918..Noel, Capt. E. W. C. (Political Department).

1919..Keeling, Lieut.-Col. E. H., M.C., R.E.
Alla Sa, Jemadar, N. E. Frontier Corps.

1920..Blacker, Capt. L. V. S., Q. V. O. Corps of Guides.
Awal Nur, C. Q. M. Havildar, 2nd Bn., Q. V. O. Corps of Guides. (Special gratuity of Rs. 200.)

1921..Holt, Maj. A. L., Royal Engineers.
Sher Ali, Sepoy No. 4952, 106th Hazara Pioneers.

1922..Abdul Samad Shah, Capt., O.B.E., 31st D.C.O. Lancers.
Nur Muhammad, Lance-Naik, 1st Guides Infantry, F. F.

1923..Bruce, Capt. J. G., 2/6th Gurkha Rifles.
Sohbat, Head Constable, N.-W. F. Police.
Hari Singh Thapa, Survey Department (specially awarded a silver medal).

1924..Rahmat Shah, Havildar, I.D.S.M., N.-W. F. Corps.
Ghulam Hussain, Naik, N.-W. F. Corps.

MACGREGOR MEMORIAL MEDALLISTS—(*concld.*).

1925..SPEAR, Capt. C. R., 5/13th Frontier Force Rifles.
JABBAR KHAN, Naik, 5/13th Frontier Force Rifles.
1926..HARVEY-KELLY, Maj. C. H. G. H., D.S.O., 4/10th Baluch Regiment.
1927..LAKE, Maj. M. C., 4/4th Bombay Grenadiers.
1928..BOWERMAN, Capt. J. F., 4/10th D.C.O. Baluch Regiment.
MUHAMMAD KHAN, Havildar, Zhob Levy Corps.
1929..ABDUL HANAN, Naik, N.-W. F. Corps (with gratuity of Rs. 100).
GHULAM ALI, Dafadar, Guides Cavalry (specially awarded a silver medal).
1930..GREEN, Capt. J. H., 3/20th Burma Rifles.
1931..O'CONNOR, Capt. R. L., 1/9th Jat Regiment.
KHIAL BADSHAH, Naik, 1/13th Frontier Force Rifles.

UNITED SERVICE INSTITUTION OF INDIA.

PRIZE ESSAY GOLD MEDALLISTS.

(*With Rank of Officers at the date of the Essay*).

1872..ROBERTS, Lieut.-Col. F. S., V.C., C.B., R.A.
1873..COLQUHOUN, Capt. J. S., R.A.
1874..COLQUHOUN, Capt. J. S., R.A.
1879..ST. JOHN, Maj. O. B. C., R.E.
1880..BARROW, Lieut. E. G., 7th Bengal Infantry.
1882..MASON, Lieut. A. H., R.E.
1883..COLLEN, Maj. E. H. H., S.C.
1884..BARROW, Capt. E. G., 7th Bengal Infantry.
1887..YATE, Lieut. A. C., 27th Baluch Infantry.
1888..MAUDE, Capt. F. N., R.E.
YOUNG, Maj. G. F., 24th Punjab Infantry (specially awarded a silver medal).
1889..DUFF, Capt. B., 9th Bengal Infantry.
1890..MAGUIRE, Capt. C. M., 2nd Cavy., Hyderabad Contingent.
1891..CARDEW, Lieut. F. G., 10th Bengal Lancers.
1893..BULLOCK, Maj. G. M., Devonshire Regiment.
1894..CARTER, Capt. F. C., Northumberland Fusiliers.
1895..NEVILLE, Lieut.-Col. J. P. C., 14th Bengal Lancers.
1896..BINGLEY, Capt. A. H., 7th Bengal Infantry.

PRIZE ESSAY GOLD MEDALLISTS—(*concld.*).

1897..NAPIER, Capt. G. S. F., Oxfordshire Light Infantry.
1898..MULLALY, Maj. H., R.E.

CLAY, Capt. C. H., 43rd Gurkha Rifles (specially awarded a silver medal).

1899..NEVILLE, Col. J. P. C., S.C.
1900..THUILLIER, Capt. H. F., R.E.

LUBBOCK, Capt. G., R.E. (specially awarded a silver medal).

1901..RANKEN, Lieut.-Col. G. P. P., 46th Punjab Infantry.
1902..TURNER, Capt. H. H. F., 2nd Bengal Lancers.
1903..HAMILTON, Maj. W. G., D.S.O., Norfolk Regiment.

BOND, Capt. R. F. G., R.E. (specially awarded a silver medal).

1904..MACMUNN, Maj. G. F., D.S.O., R.F.A.
1905..COCKERILL, Maj. G. K., Royal Warwickshire Regiment.
1907..WOOD, Maj. E. J. M., 99th Deccan Infantry.
1908..JEUDWINE, Maj. H. S., R.A.
1909..MOLYNEUX, Maj. E. M. J., D.S.O., 12th Cavalry.

ELSMIE, Maj. A. M. S., 56th Rifles, F. F. (specially awarded a silver medal).

1911..Mr.D. PETRIE, M.A., Punjab Police.
1912..CARTER, Maj. B. C., The King's Regiment.
1913..THOMSON, Maj. A. G., 58th Vaughan's Rifles (F. F.).
1914..BAINBRIDGE, Lieut.-Col. W. F., D.S.O., 51st Sikhs (F. F.).

NORMAN, Maj. C. L., M.V.O., Q. V. O. Corps of Guides (specially awarded a silver medal).

1916..CRUM, Maj. W. E., V.D., Calcutta Light Horse.
1917..BLAKER, Maj. W. F., R.F.A.
1918..GOMPERTZ, Capt. A. V., M.C., R.E.
1919..GOMPERTZ, Capt. M. L. A., 108th Infantry.
1920..KEEN, Lt.-Col. F. S., D.S.O., 2/15th Sikhs.
1922..MARTIN, Maj. H. G., D.S.O., O.B.E., R.F.A.
1923..KEEN, Col. F. S., D.S.O., I.A.
1926..DENNYS, Maj. L. E., M.C., 4/12th Frontier Force Regiment.
1927..HOGG, Maj. D. McA., M.C., R.E.
1928..FRANKS, Maj. K. F., D.S.O., 5th Royal Mahrattas.
1929..DENNYS, Maj. L. E., M.C., 4/12th Frontier Force Regiment.
1930..DURNFORD, Maj. C. M. P., 4/6th Rajputana Rifles.
1931..FORD, Lt.-Col. G. N., 2/5th Mahratta Light Infantry.

ANCHOR LINE

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(From an officer who succeeded in gaining admission to the Staff College at the 1931 Examination).

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United Service Institution of India.

JULY 1932.

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I.—New Members.

The following new members joined the Institution from 1st March to 31st May 1932 :—

ORDINARY MEMBERS.

G. R. F. Tottenham, Esq., C.I.E., I.C.S.
H. A. F. Metcalfe, Esq., C.I.E., M.V.O., I.C.S.
Major-General G. Thorpe, C.B., C.M.G., D.S.O
Brig.-General G. R. H. Cheape, C.M.G., D.S.O., M.C.
P. R. Cadell, Esq., C.S.I.
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Captain J. D. deWilton.
,, E. J. R. Emtage.
,, W. H. E. Gott, M.C.
,, R. A. Grant.
,, C. I. Jerrard.
,, W. H. Emsden-Lambert.
,, C. S. W. Rayner.
,, S. E. Tayler.
,, S. J. Pope.
Lieut. C. J. W. Simpson.
F. F. P. Gill, Esq., Indian Police.
H. C. B. Jollye, Esq., Indian Forest Service.

II.—The Journal.

The Institution publishes a Quarterly Journal in the months of January, April, July and October, which is issued postage free to members in any part of the world.

Non-members may obtain the Journal at Rs. 2 annas 8 per number, or Rs. 10 per annum. Advertisement rates may be obtained on application to the Secretary.

III.—Contributions to the Journal.

Members and the public are invited to contribute articles to the Journal of the Institution. Articles may vary in length from two thousand to ten thousand words. Payment is made at from Rs. 3 0

to Rs. 100 in accordance with the value and length of the contribution. Payment is made on publication.

Articles submitted for publication must be typed in *duplicate*, on one side of the paper only. Drawings, plans, maps, etc., for reproduction should be in *jet* black. No washes or ribands of colour should on any account be used. If it is absolutely necessary to use colours (and these are only permissible in line work or names) the following will reproduce photographically, *i.e.*, dark red, dark orange, dark green. No other colour should on any account be used.

With reference to Regulations for the Army in India, paragraph 204 and King's Regulations, paragraph 522, action to obtain the sanction of His Excellency the Commander-in-Chief to the publication of any article in the Journal of the United Service Institution of India will be taken by the Executive Committee of the Institution.

Anonymous contributions under a *nom-de-plume* will not be accepted or acknowledged; all contributions must be sent to the Secretary under the name of the writer and the paper will, if accepted, be published under that name unless a wish is expressed for it to be published under a *nom-de-plume.* The Executive Committee will decide whether the wish can be complied with.

The Committee reserve to themselves the right of omitting any matter which they consider objectionable, and do not undertake to authorise the publication of such papers as are accepted in the order in which they may have been received.

Manuscripts of original papers sent for publication in the Journal will not be returned to the contributor unless he expresses a wish to have them back and pays the postage.

Articles are only accepted on these conditions.

Contributors will be supplied with three copies of their paper *gratis*, if published.

IV.—Reading Room and Library.

The United Service Institution of India is situated in the Mall, Simla, and is open all the year round—including Sundays—from 9 A.M. until sunset.

The Reading oom of the Institution is provided with most of the leading illustrated papers, newspapers, magazines, and journals of military interest that are published. Papers, magazines, " works

of reference" or books marked "Not to be Taken Away," or noted as "Confidential," may not be removed from the Reading Room.

There is a well-stocked library in the Institution, from which members can obtain books on loan free, in accordance with the following rules:—

(1) The Library is only open to members and honorary members of the United Service Institution of India. Members are requested to look upon books as not transferable to their friends.

(2) No book shall be taken from the Library without making the necessary entry in the register. Members residing permanently or temporarily in Simla are requested to enter their addresses.

(3) The United Service Institution of India is open all the year round—including Sundays—from 9 A.M. until sunset. Books may be taken out at any time provided Rule 2 is complied with.

(4) A member shall not be allowed at one time, more than three books or sets of books.

(5) Papers, magazines, "works of reference" or books marked "Not to be Taken Away," or noted as "Confidential," may not be removed.

(6) No particular limit is set as to the number of days for which a member in Simla may keep a book, the Council being desirous of making the Library as useful as possible to members; but if after the expiration of a fortnight from date of issue it is required by any other member it will be re-called.

(7) Applications for books from members at out-stations are dealt with as early as possible, and books are despatched per Registered Parcel Post. They must be returned carefully packed per Registered Parcel Post within one month of date of issue.

(8) If a book is not returned at the end of one month, it must be paid for without the option of return, if so required by the Executive Committee.

(9) Lost and defaced books shall be replaced at the cost of the member to whom they were issued. In the case of lost books which are out of print the value shall be fixed by the Executive Committee, and the amount, when received, spent in the purchase of a new book.

(10) The issue of a book under these rules to any member implies the latter's compliance with the rules, and the willingness to have them enforced, if necessary, against him.

(11) A list of all books presented and purchased, and also a list of books useful to members studying for the Staff College and Promotion Examinations, will be found under Secretary's Notes in the quarterly issue of the U. S. I. Journal.

(12) Members are invited to contribute presents of books, maps and photographs of naval and military interest. These may be addressed to the Secretary, U. S. I. of India, Simla. They will be duly acknowledged.

(13) The catalogue of the Library is completed to 31st March 1924. Price Rs. 3-8-0 or postage paid Rs. 3-14-0. An addendum completed up to 30th September 1927 is available. Price annas 8 *plus* postage annas 4.

V.—New Books.

BOOKS PRESENTED.

Title.	*Published.*	*Author.*
The Armaments Year-Book, Special edition	.. 1932	.. The League of Nations.
Margaret Outram, 1778-1863 (Presented by Messrs. John Murray, London.)	.. 1932	.. Mary F. Outram.
Elementary Tactics.—The Art of War.. Vol. I (Presented by Messrs. Sifton Praed & Coy., Ltd., London.)	1932	.. R. P. Pakenham-Walsh.
The Annual Report of the Smithsonian Institute, 1930 (Presented by the Smithsonian Institute, Washington.)	1931 ..	..
The Handbook of the Turkish Army	1931	.. Official.
The Indian Ocean	.. 1932	.. Stanley Rogers.
(Presented by Messrs. G. G. Harrap & Co., Ltd., London)	..	..

BOOKS PURCHASED.

A Short History of British Expansion, 2nd edition.	1930	.. James A. Williamson.
The Duke	.. 1931	.. Philip Guedalla.

Books Purchased.

Title.	*Published.*	*Author.*
The Pound Sterling-History of English Money.	1931 ..	A. E. Feavearyear.
Six British Soldiers	1931 ..	Hilaire Belloc.
The Soviet Five-Year Plan and its effect on World Trade.	1931 ..	H. R. Knickerbocker.
The Life of Sir Charles Monro	1931 ..	Genl. Sir George Barrow.
The Religious and Hidden Cults of India.	1931 ..	Sir George MacMunn.
The Moral Issue of India	1931 ..	Robert Stokes.
The Unseen Assassin	1932 ..	Sir Norman Angell.
Behind the Scenes of International Finance.	1932 ..	Paul Einzig,
The Dragon's Teeth—A Study of War & Peace.	1932 ..	Col. J. F. G. Fuller.
Manchuria—The Cockpit of Asia	1932 ..	Col. P. T. Etherton & Hessell Tiltman.
The Official History, Military Operations in Gallipoli from May 15th to the Evacuation, Vol. II, with maps and appendices.	1932 ..	Aspinall Oglander.

Books on Order.

British Documents on the Origins of the War, 1898-1914, Vol. VII.	G. P. Gooch & H. Temperley.
The Caste System of Northern India	E. A. H. Blunt.
Problems of Imperial Defence	.. Cole
The Statesman's Year-Book, 1932	.. ..

VI.—Army Examinations.

(*a*) *Promotion.*—The following table shows the campaigns on which the military history papers will be set from October 1932, for lieutenants for promotion to captain in sub-head (*b*) (*iii*) and for captains for promotion to major in sub-head (*d*) (*iii*):—

1	2	3	4	5
Serial No.	Date of examination.	Campaign set for the first time.	Campaign set for the second time.	Campaign set for the last time.
1	October 1932	Shenandoah Valley Campaign (1861-62).	..	Egypt and Palestine, from the outbreak of the War with Germany to June 1917.
2	March 1933 ..	Egypt and Palestine, as covered by the History of the Great War—Military Operations—Egypt and Palestine, Vols. I and II.	Shenandoah Valley Campaign (1861-62).	..
3	October 1933	..	Egypt and Palestine, as covered by the History of the Great War—Military Operations—Egypt and Palestine, Vols. I and II.	Shenandoah Valley Campaign (1861-62).
4	March 1934 ..	France and Belgium, 1914, up to and including the Aisne.	..	Egypt and Palestine, as covered by the History of the Great War—Military Operations—Egypt and Palestine, Vols. I and II.
5	October 1934	Mesopotamia, up to and including the capture of Kut-al-Amara, October 1915.	France and Belgium, 1914, up to and including the Aisne.	..
6	March 1935 ..	..	Mesopotamia, up to and including the capture of Kut-al-Amara, October 1915.	France and Belgium, 1914, up to and including the Aisne.
7	October 1935	..	..	Mesopotamia, up to and including the capture of Kut-al-Amara, October 1915.

(*b*) *Staff College.*—(See Staff College (Camberley) Regulations, 1930, obtainable from the Central Publication Branch, Calcutta).

The following campaigns have been set for the Staff College Entrance Examination :—

Strategy of—

Napoleon's Campaign of 1796 in Italy.

Waterloo Campaign.

Peninsula Campaign up to and including the Battle of Salamanca.

The strategy and broad tactical lessons of—

The American Civil War.

Russo-Japanese War up to and including the Battle of Liao-Yang.

The Great War in France, Belgium, Mesopotamia, the Dardanelles and Palestine, including a knowledge of the influence on the strategy in these areas of the events in other theatres of the War.

The East Prussian Campaign, 1914.

The strategy and tactics of—

The Palestine Campaign from 9th November 1917 to the end of the War.

The action of the British Expeditionary Force in France and Belgium up to and including the Battle of the Aisne.

The 3rd Afghan War, 1919.

VII.—Books recommended for Staff College and Promotion Examination Students.

The following list of books available in the Library may be found useful for reference by officers studying for Promotion Examinations or entrance to the Staff College. In addition to those enumerated

below there is a large number of books in the Library dealing with Military History, Tactics, Organization, Administration, Military Geography, Languages, etc. Should any member require a book not shown in this list he should apply to the Librarian, when it will, if procurable, be forwarded to him.

(The list of books presented and purchased as shown in the Journal should also be consulted.)

MILITARY HISTORY.

(Before beginning to read Military History, candidates are advised to study carefully Section 9, Training and Manœuvre Regulations, 1923.)

1.—*The Great War, General History.*

Soldiers and Statesmen (Field-Marshal Sir W. Robertson).

The World Crisis (Winston Churchill).

The Real War (Liddell Hart).

My War Memories (Ludendorff).

General Headquarters, 1914—16, and its Critical Decisions (Falkenhayn).

2.—*The Campaign of the British Army in France and Belgium.*

A.—Official History of the War.

Military Operations, France and Belgium, Vols. I to V.

B.—Other Books.

Forty Days in 1914 (Maurice, new edition).

Ypres, 1914. (An official account) (German General Staff).

Story of the Fourth Army (Montgomery).

The Last Four Months (Maurice).

3.—*The Palestine Campaign.*

A.—Official Accounts.

A Brief Record of the Advance of the Egyptian Expeditionary Force, 1919.

The Official History of the Great War. Military Operations in Egypt and Palestine, Vol. I, and Maps (Lieut.-General Sir G. MacMunn).

The Official History, Operations, Egypt and Palestine, from June 17th to the end of the War, Parts I and II, with maps (Capt. Cyril Falls).

B.—Other Books.

The Revolt in the Desert (T. E. Lawrence).

Outline of the Egyptian and Palestine Campaigns 1914—18 (Bowman Manifold).

The Palestine Campaign (Colonel A. P. Wavell).

Army Quarterly—January 1922 (Lieut.-Colonel Wavell and C. T. Atkinson's articles).

Cavalry Journal—October 1921 (Lieut.-Colonel Rex Osborne's article)—July 1923 (Lieut.-Colonel Beston's article).

R. U. S. I. Journal—May 1922 (Colonel-Commandant Weir's article).

U. S. I. Journal—October 1923 (Captain Channer's article).

4.—*The Dardanelles Campaign.*

A.—Official Accounts.

Naval and Military Despatches	A clear account of the operations in detail from the G. H. Q standpoint.
Reports of the Dardanelles Commission.	Fixes responsibility for the inception and conduct of the campaign. An interesting study in the relationship between Politicians and Naval and Military Experts.

Despatches from the Dardanelles (Ian Hamilton).

Official History of the Great War, Gallipoli, May 1915, Vol. I, (C. F. Aspinall Oglander).

B.—Other Books.

The Dardanelles (Callwell) ..The best unofficial account and criticism of the strategic conduct of the campaign.

5.—*The Mesopotamia Campaign.*

A.—Official Account.

Official History of the Campaign in Mesopotamia, Vols. I to IV, (F. J. Moberly).

B.—Other Books.

Critical Study of the Campaign in Mesopotamia up to April 1917 (Staff College).

The Campaign in Mesopotamia, 1914—18 (Evans).

A Chapter of Misfortunes.

My Campaign in Mesopotamia (Townshend).

Mesopotamia, 1917—20, A Clash of Loyalties (Sir A. Wilson).

6.—*Waterloo Campaign.*

Wellington and Waterloo (Arthur Griffiths).

Waterloo, the Downfall of the first Napoleon (George Hooper).

Campaign of 1815 (W. H. James).

With Napoleon at Waterloo (E. B. Low).

Waterloo (Ropes).

Campaign of 1815, Ligny: Quatre-Bras: Waterloo (W. O'Connor Morris).

Waterloo Campaign (S. C. Pratt).

Wellington and Waterloo (G. W. Redway).

Wellington's Campaigns. Peninsula—Waterloo, 1808—15, also Moore's.

Campaign of Corunna (C. W. Robinson).

7.—*Marlborough's Campaigns.*

History of the British Army, Vol. I (Hon. J. W. Fortescue).

Life of John, Duke of Marlborough, Vols. I and II (Archibald Alison).

The Wars of Marlborough, 1702—09 (Frank Taylor).

John Churchill, Duke of Marlborough, Vols. I and II (Viscount Wolseley).

Marlborough and the Rise of the British Army (C. T. Atkinson).

A Short Life of Marlborough (H. J. & E. A. Edwards).

The Battle of Blenheim (Hilaire Belloc).

Marlborough and his Campaigns, 1702—1709 (A. Kearsey).

8.—*The American Civil War.*

Stonewall Jackson and the American Civil War (G. F. R. Henderson).

History of the Civil War in the United States, 1861—65 (W. B. Wood and J. E. Edmonds).

History of the Campaign of Gen. T. J. (Stonewall) Jackson in the Shenandoah Valley of Virginia (William Allen).

A Study of the Strategy and Tactics of the Shenandoah Valley Campaign, 1861-1862 (A. Kearsey).

The American Civil War, 1861—64 (John Formby).

History of the American Civil War (J. W. Draper).

Fredericksburg and Chancellorsville (J. E. Gough).

Battles and Leaders of the Civil War (Johnson and Buell).

Robert E. Lee, The Soldier (Maurice).

Sherman (Liddell Hart).

9.—*The East Prussian Campaign.*

Tannenberg—First 30 days in East Prussia (Edmund Ironside).

Out of my Life (Von Hindenburg).

My War Memories (Ludendorff).

10.—*The Russo-Japanese War*, 1904, *up to and including the Battle of Liao-Yang.*

Lectures on the Strategy of the Russo-Japanese War (Bird).

Questions on the Russo-Japanese War (Brunker).

Official Account: The Russo-Japanese War (Naval and Military). 3 Vols., published by Committee of Imperial Defence.

Outline of the Russo-Japanese War (Ross).

A Study of the Russo-Japanese War (Chasseur).

Outline History of the Russo-Japanese War, 1904, up to the Battle of Liao-Yang, with Questions and Answers (P. W.).

An Account of the Battle of Liao-Yang (with questions and 10 maps for examination purposes) (Bird).

11.—*Napoleon's Italian Campaign*, 1796-97.

Napoleon's Campaign in Italy (Burton).

Encyclopædia Britannica.

ORGANIZATION AND ADMINISTRATION.

12.—*Organization of the Army.*

A.—Organization of the Army since 1868.

History of British Army, by Fortescue, Vols. I to XIII.

Outline of the Development of the British Army, by Major-General Sir W. H. Anderson.

B. —Forces of the Empire.

The Annual Army Estimates of Effective and Non-Effective Services (H. M. Stationery Office).

Notes on the Land Forces of the British Dominions, Colonies, Protectorates and Mandated Territories.

The Statesman's Year Book.

Army List.

C.—Foreign Armies.

League of Nations Handbook, Armaments.

War Office Official Handbooks of Foreign Armies.

13.—*Development and Constitution of the British Empire.*

A.—The British Empire.

Encyclopædia Britannica—(Contains much concentrated information).

The Statesman's Year Book.

Whitaker's Almanack.

The Colonial Office List.

The Government of the British Empire (Jenks, 1923).

The Foundation and Growth of the British Empire (J. A. Williamson, 1918).

The Beginnings of English Overseas Enterprise (C. P. Lucas, 1917).

The Government of England (L. A. Lowell, 1912).

The Expansion of the British Empire (W. H. Woodward, 1927 edition).

The Origin and Growth of the English Colonies and of Their System of Government (H. E. Egerton, 1903).

The English Constitution (Bagehot, 1909).

England in the Seven Years' War (Sir J. Corbett, 1907).

B.—Books on Special Portions of the Empire or World.

The Rise and Expansion of British Dominions in India (Sir A. O. Lyall, 1894).

General Survey of the History of India (Sir Verney Lovett).

India in 1928-29 (J. Coatman).

India in 1929-30 (Bajpai).

Modern Egypt (Cromer, 1908).

Egypt and the Army (Elgood, 1924).

The History of Canada (W. L. Grant).

Report on British North America (Sir C. P. Lucas).

The Union of South Africa (R. H. Brand, 1909).

History of the Australasian Colonies (Jenks, 1912).

The Lost Possessions of England (W. F. Lord, 1896).

International Relations of the Chinese Empire (H. B. Mosse) (Kelly and Walsh, Shanghai).

What's Wrong with China ? (Gilbert).

Why China Sees Red (Putnam-Weale).

MILITARY GEOGRAPHY.

14.—*Military Geography.*

Naval and Military Geography of the British Empire (Dr. Vaughan Cornish, 1916).

Imperial Military Geography (Capt. D. H. Cole).

Imperial Communications (Wakeley).

Imperial Economy (Major R. J. Wilkinson).

TACTICS.

15.—*Tactical Problems.*

Common mistakes in the solution of tactical problems and how to avoid them (Lieut.-Colonel A. B. Beauman, 1926).

Historical illustrations to Field Service Regulations, Vol. II (Major E. G. Eady, 1926).

Elementary Tactics or the Art of War, British School (Major R. P. Pakenham-Walsh, 1927).

VIII.—Schemes.

Efforts are being made to compete with demands for tactical schemes from officers working for the Staff College and Promotion Examinations by introducing as many new schemes as possible. In addition to reprints of several schemes, the Institution is now in possession of the complete set of schemes with solutions set at the 1931 Army Headquarters Staff College Course.

It is obviously impossible for the Secretary to undertake the correction of individual solutions, but all the recent schemes include a suggested solution in the form in which it is considered that the paper should have been answered, with reasons for the solution given.

In order to simplify their issue, the schemes have been classified and numbered as follows.

They can all be obtained by V. P. P., *plus* postage, on application to the Secretary. When ordering members are requested to give the number and subject of the schemes required.

PROMOTION SERIES.

(*A*) *Administrative Exercise, with diagram.* (*Reprinted May*, 1928). To illustrate the supply system of a Division ..Rs. 2.

(*B*) *Tactical Schemes* (*Reprinted May*, 1928). Complete with maps and solutions :—

Lieutenant to Captain.

(*i*) Mountain Warfare .. .. ..Rs. 2-8

(*ii*) Defence and Attack orders .. .. „ 2-8

Captain to Major.

(*i*) Outposts .. .. „ 2-8
Defensive position.
Withdrawal.

(*ii*) Tactical exercise without troops .. .. „ 2-8
Reconnaissance.
Attack orders.

STAFF COLLEGE SERIES.

(*C*) *Tactical Schemes* (*Reprinted May*, 1928). With one map for the three schemes and solutions :—

(*i*) Approach March .. .. ..Rs. 2-8
Reconnaissance before night attack.
Orders for night attack.

(*ii*) Outposts .. .. ,, 2-8
Defence.
Action of a force retiring.

(*iii*) Move by M. T. .. .. .. ,, 2-8
Occupation of a defensive position.
Counter-attack.

(*D*) *Army Headquarters Staff College Course Tactical Schemes*—

1928.—Three Tactical Schemes, complete with maps and solutions ..Rs. 3 each (Re. 1 without maps).

(*i*) Advanced-Guard, Operation Orders and Appreciation.

(*ii*) Withdrawal—Operation Orders.

(*iii*) Rear-Guard, Appreciation and Operation Orders. (Map as for (*i*).)

1929.—Three Tactical Schemes, complete with maps and solutions ..Rs. 3 each (Re. 1 without maps).

(*i*) Withdrawal—Appreciation.

(*ii*) Advanced-Guard, Operation Orders with march table. (Map as for (*i*).)

(*iii*) Attack, Appreciation and Operation Orders.

1931.—Strategy and Tactics papers, complete with maps and solutions .. Rs. 3 each (Re. 1 without maps).

(*i*) Training for War (Protection).

(*ii*) Advanced-Guard and Attack.

(*iii*) Attack, Appreciation and Operation Orders. (Map as for (*i*).)

(*E*) *Mountain Warfare.*

A scheme, with map and solution (Reprinted May, 1928) .. .. .. Rs. 2-8

(*F*) *Administrative Exercise, with diagram (Reprinted May,* 1928). To illustrate the supply system of a Division .. Rs. 2

(*G*) *Other Schemes and Specimen Examination Papers.*

(*i*) Supply Problem (without maps and solutions) (1930) .. .. ..Re. 1 each.

(*ii*) The History and Organization of the Empire (1931) .. .. ..Re. 1 each.

(*iii*) Organization, Administration and Transportation (Peace), (1931) (with suggested answers) .. .. ..Re. 1 each.

(*iv*) Withdrawal (without map), (1931) ..Re. 1 each.

IX.—Precis of Lectures.

A number of précis of lectures delivered to the Army Headquarters Staff College Course is available for members on payment. These précis are sufficiently full to be of great value to those who have not attended the lectures. The date of the précis is given in each case.

(*i*) Night Operations (1931) .. ..Rs. 2/- each.

(*ii*) The East Prussian Campaign, 1914 (1931) .. Re. 1/8 ,,

(*iii*) The Third Afghan War (1931) .. .. ,, 1/8 ,,

(*iv*) The Palestine Campaign, I (1930) .. ,, 1/8 ,,

(*iv-a*) The Palestine Campaign, II (1930) .. ,, 1/8 ,,

(*v*) American Civil War (1930) .. .. ,, 1/- ,,

(*vi*) Military Evolution, and the Influence of modern inventions on Warfare (1931).. ,, 1/- ,,

(*vii*) Supply of a Division in War (1930) .. ,, 1/- ,,

(*viii*) History and Organization of the Empire (1931) ,, 1/- ,,

(*ix*) Hints on working for examinations (1930) .. As.-/8/- ,,

(*x*) The Employment of Artillery (1930) .. ,, -/8/- ,,

(*xi*) Artillery (1931), 1st Lecture .. .. ,, -/8/- ,,

(*xi-a*)	Artillery (1931), 2nd Lecture	As. /8/ each.
(*xii*)	Anti-Aircraft Defence (1930)	,, ,, ,,
(*xiii*)	Wireless Communications in the R.A.F. (1931)	,, ,, ,,
(*xiv*)	Air Co-operation (1931)	,, ,, ,,
(*xv*)	The Employment of Divisional Cavalry (1930)	,, ,, ,,
(*xvi*)	Anti-Gas Defence (1931)	,, ,, ,,
(*xvii*)	Tanks (1930)	,, ,, ,,
(*xviii*)	Armoured Cars (1930)	,, ,, ,,
(*xix*)	Military Engineering (1930)	,, ,, ,,
(*xx*)	Signals in the Division (1930)	,, ,, ,,
(*xxi*)	Mountain Warfare, II (1930)	,, ,, ,,
(*xxii*)	The Organization of the British Army (1930)	,, ,, ,,
(*xxiii*)	Mobilization (1930)	,, ,, ,,
(*xxiv*)	Reinforcements (1930)	,, ,, ,,
(*xxv*)	Military Law, I (1930)	,, ,, ,,
(*xxv-a*)	Military Law, II (1930)	,, ,, ,,
(*xxv-b*)	Military Law, III (1930)	,, ,, ,,
(*xxvi*)	The " Q" Administrative Services in Peace (1930)	,, ,, ,,
(*xxvii*)	The Auxiliary and Indian Territorial Forces (1929)	,, ,, ,,
(*xxviii*)	Training (1930)	,, -/4/- ,,
	Course of five lectures given at the London School of Economics, 1925, on " Transportation in War "	,, -/12/- ,,

X.—Historical Research.

The U. S. I. is prepared to supply members and units with type-written copies of old Indian Army List pages, at the rate of Rs. 2 per type-written page.

The staff of the Institution is always available to assist units, authors of regimental histories and members by searching the many old military records in the Library on their behalf.

XI.—The MacGregor Memorial Medal.

1. The MacGregor Memorial Medal was founded in 1888 as a memorial to the late Major-General Sir Charles MacGregor. The medals are awarded for the best military reconnaissances or journeys of exploration of the year.

MacGregor Memorial Medal—*concld.*

2. The following awards are made annually in the month of June :—

(*a*) For officers—British or Indian—silver medal.

(*b*) For soldiers—British or Indian—silver medal, with Rs. 100 gratuity.

3. For especially valuable work a gold medal may be awarded in place of one of the silver medals, or in addition to the silver medals, whenever the administrators of the fund deem it desirable. Also the Council may award a special additional silver medal, without gratuity, to a soldier, for especially good work.

4. The award of medals is made by His Excellency the Commander-in-Chief, as Vice-Patron, and the Council of the United Service Institution who were appointed administrators of the Fund by the MacGregor Memorial Committee.

5. Only officers and soldiers belonging to the Army in India (including those in civil employ) are eligible for the award of the medal.*

6. The medal may be worn in uniform by Indian soldiers on ceremonial parades, suspended round the neck by the ribbon issued with the medal.†

(*i*) Personal risk to life during the reconnaissance or exploration is not a necessary qualification for the award of the medal; but in the event of two journeys being of equal value, the man who has run the greater risk will be considered to have the greater claim to the reward.

(*ii*) When the work of the year has either not been of sufficient value, or has been received too late for consideration before the Council Meeting, the medal may be awarded for any reconnaissance during previous years considered by His Excellency the Commander-in-Chief to deserve it.

MACGREGOR MEMORIAL MEDALLISTS.

(*With rank of officers and soldiers at the date of the Award*).

1889..BELL, Col. M. S., V.C., R.E. (specially awarded a gold medal).

1890..YOUNGHUSBAND, Capt. F. E., King's Dragoon Guards.

*N.B.—The terms "officer" and "soldier" include those serving in the British and Indian armies and their reserves, also those serving in Auxiliary Forces, such as the Indian Auxiliary and Territorial Forces and Corps under Local Governments, Frontier Militia, Levies and Military Police, also all ranks serving in the Indian States Forces.

† Replacements of the ribbon may be obtained on payment from the Secretary, U. S. I., Simla.

MacGregor Memorial Medallists—(*contd.*).

1891..Sawyer, Maj. H. A., 45th Sikhs.
Ramzan Khan, Havildar, 3rd Sikhs.
1892..Vaughan, Capt. H. B., 7th Bengal Infantry.
Jaggat Singh, Havildar, 19th Punjab Infantry.
1893..Bower, Capt. H., 17th Bengal Cavalry (specially awarded a gold medal).
Fazaldad Khan, Dafadar, 17th Bengal Cavalry.
1894..O'Sullivan, Maj. G. H. W., R.E.
Mull Singh, Sowar, 6th Bengal Cavalry.
1895..Davies, Capt. H. R., Oxfordshire Light Infantry.
Ganga Dyal Singh, Havildar, 2nd Rajputs.
1896..Cockerill, Lieut. G. K., 28th Punjab Infantry.
Ghulam Nabi, Sepoy, Q. O. Corps of Guides.
1897..Swayne, Capt. E. J. F., 10th Rajput Infantry.
Shahzad Mir, Dafadar, 11th Bengal Lancers.
1898..Walker, Capt. H. B., Duke of Cornwall's Light Infantry.
Adam Khan, Havildar, Q. O. Corps of Guides.
1899..Douglas, Capt. J. A., 2nd Bengal Lancers.
Mihr Din, Naik, Bengal Sappers and Miners.
1900..Wingate, Capt. A. W. S., 14th Bengal Lancers.
Gurdit Singh, Havildar, 45th Sikhs.
1901..Burton, Maj. E. B., 17th Bengal Lancers.
Sundar Singh, Colour Havildar, 31st Burmah Infantry.
1902..Ray, Capt. M. R. E., 7th Rajput Infantry.
Tilbir Bhandari, Havildar, 9th Gurkha Rifles.
1903..Manifold, Lieut.-Col. C. C., I.M.S.
Ghulam Hussain, Lance-Dafadar, Q. O. Corps of Guides.
1904..Fraser, Capt. L. D., R.G.A.
Moghal Baz, Dafadar, Q. O. Corps of Guides.
1905..Rennick, Maj. F., 40th Pathans (specially awarded a gold medal).
Madho Ram, Havildar, 8th Gurkha Rifles.
1906..Shahzada Ahmad Mir, Risaldar, 36th Jacob's Horse.
Ghafur Shah, Lance-Naik, Q. O. Corps of Guides Infantry.
1907..Nangle, Capt. M. C., 92nd Punjabis.
Sheikh Usman, Havildar, 103rd Mahratta Light Infantry.
1908..Gibbon, Capt. C. M., Royal Irish Fusiliers.
Malang, Havildar, 56th Punjab Rifles.
1909..Muhammad Raza, Havildar, 106th Pioneers.

MacGregor Memorial Medallists—(*contd.*).

1910..Sykes, Maj. P. M., C.M.G., late 2nd Dragoon Guards (specially awarded a gold medal).
Turner, Capt. F. G., R.E.
Khan Bahadur Sher Jung, Survey of India.

1911..Leachman, Capt. G. E., The Royal Sussex Regiment.
Gurmukh Singh, Jemadar, 93rd Burmah Infantry.

1912..Pritchard, Capt. B. E. A., 83rd Wallajahabad Light Infantry (specially awarded a gold medal).
Wilson, Lieut. A. T., C.M.G., 32nd Sikh Pioneers.
Mohibulla, Lance-Dafadar, Q. V. O. Corps of Guides.

1913..Abbay, Capt. B. N., 27th Light Cavalry.
Sirdar Khan, Sowar, 39th (K. G. O.), Central India Horse.
Waratong, Havildar, Burmah Military Police (specially awarded a silver medal).

1914..Bailey, Capt F. M., I.A. (Political Department).
Morshead, Capt. H. T., R.E.
Haidar Ali, Naik, 106th Hazara Pioneers.

1915..Waterfield, Capt. F. C., 45th Rattray's Sikhs.
Ali Juma, Havildar, 106th Hazara Pioneers.

1916..Abdur Rahman, Naik, 21st Punjabis.
Zarghun Shah, Havildar, 58th Rifles (F. F.) (specially awarded a silver medal).

1917..Mian Afraz Gul, Sepoy, Khyber Rifles.

1918..Noel, Capt. E. W. C. (Political Department).

1919..Keeling, Lieut.-Col. E. H., M.C., R.E.
Alla Sa, Jemadar, N. E. Frontier Corps.

1920..Blacker, Capt. L. V. S., Q. V. O. Corps of Guides.
Awal Nur, C. Q. M. Havildar, 2nd Bn., Q. V. O. Corps of Guides. (Special gratuity of Rs. 200.)

1921..Holt, Maj. A. L., Royal Engineers.
Sher Ali, Sepoy No. 4952, 106th Hazara Pioneers.

1922..Abdul Samad Shah, Capt., O.B.E., 31st D.C.O. Lancers.
Nur Muhammad, Lance-Naik, 1st Guides Infantry, F. F.

1923..Bruce, Capt. J. G., 2/6th Gurkha Rifles.
Sohbat, Head Constable, N.-W. F. Police.
Hari Singh Thapa, Survey Department (specially awarded a silver medal).

1924..Rahmat Shah, Havildar, I.D.S.M., N.-W. F. Corps.
Ghulam Hussain, Naik, N.-W. F. Corps.

MACGREGOR MEMORIAL MEDALLISTS—(*concld.*).

1925..SPEAR, Capt. C. R., 5/13th Frontier Force Rifles.
JABBAR KHAN, Naik, 5/13th Frontier Force Rifles.
1926..HARVEY-KELLY, Maj. C.H.G.H., D.S.O., 4/10th Baluch Regiment.
1927..LAKE, Maj. M. C., 4/4th Bombay Grenadiers.
1928..BOWERMAN, Capt. J. F., 4/10th D.C.O. Baluch Regiment.
MUHAMMAD KHAN, Havildar, Zhob Levy Corps.
1929..ABDUL HANAN, Naik, N.-W. F. Corps (with gratuity of Rs. 100).
GHULAM ALI, Dafadar, Guides Cavalry (specially awarded a silver medal).
1930..GREEN, Capt. J. H., 3/20th Burma Rifles.
1931..O'CONNOR, Capt. R. L., 1/9th Jat Regiment.
KHIAL BADSHAH, Naik, 1/13th Frontier Force Rifles.
1932..BIRNIE, Capt. E. St. J., Sam Browne's Cavalry.
SHIB SING NEGI, No. 4013 Rifleman, 10/18th Royal Garhwal Rifles.

UNITED SERVICE INSTITUTION OF INDIA.

PRIZE ESSAY GOLD MEDALLISTS.

(*With Rank of Officers at the date of the Essay*).

1872..ROBERTS, Lieut.-Col. F. S., V.C., C.B., R.A.
1873..COLQUHOUN, Capt. J. S., R.A.
1874..COLQUHOUN, Capt. J. S., R.A.
1879..ST. JOHN, Maj. O. B. C., R.E.
1880..BARROW, Lieut. E. G., 7th Bengal Infantry.
1882..MASON, Lieut. A. H., R.E.
1883..COLLEN, Maj. E. H. H., S.C.
1884..BARROW, Capt. E. G., 7th Bengal Infantry.
1887..YATE, Lieut. A. C., 27th Baluch Infantry.
1888..MAUDE, Capt. F. N., R.E.
YOUNG, Maj. G. F., 24th Punjab Infantry (specially awarded a silver medal).
1889..DUFF, Capt. B., 9th Bengal Infantry.
1890..MAGUIRE, Capt. C. M., 2nd Cavy., Hyderabad Contingent.
1891..CARDEW, Lieut. F. G., 10th Bengal Lancers.
1893..BULLOCK, Maj. G. M., Devonshire Regiment.
1894..CARTER, Capt. F. C., Northumberland Fusiliers.
1895..NEVILLE, Lieut.-Col. J. P. C., 14th Bengal Lancers.
1896..BINGLEY, Capt. A. H., 7th Bengal Infantry.

PRIZE ESSAY GOLD MEDALLISTS—(*concld.*).

1897..NAPIER, Capt. G. S. F., Oxfordshire Light Infantry.
1898..MULLALY, Maj. H., R.E.

CLAY, Capt. C. H., 43rd Gurkha Rifles (specially awarded a silver medal).

1899..NEVILLE, Col. J. P. C., S.C.
1900..THUILLIER, Capt. H. F., R.E.

LUBBOCK, Capt. G., R.E. (specially awarded a silver medal).

1901..RANKEN, Lieut.-Col. G. P. P., 46th Punjab Infantry.
1902..TURNER, Capt. H. H. F., 2nd Bengal Lancers.
1903..HAMILTON, Maj. W. G., D.S.O., Norfolk Regiment.

BOND, Capt. R. F. G., R.E. (specially awarded a silver medal).

1904..MACMUNN, Maj. G. F., D.S.O., R.F.A.
1905..COCKERILL, Maj. G. K., Royal Warwickshire Regiment.
1907..WOOD, Maj. E. J. M., 99th Deccan Infantry.
1908..JEUDWINE, Maj. H. S., R.A.
1909..MOLYNEUX, Maj. E. M. J., D.S.O., 12th Cavalry.

ELSMIE, Maj. A. M. S., 56th Rifles, F. F. (specially awarded a silver medal).

1911..MR.D. PETRIE, M.A., Punjab Police.
1912..CARTER, Maj. B. C., The King's Regiment.
1913..THOMSON, Maj. A. G., 58th Vaughan's Rifles (F. F.).
1914..BAINBRIDGE, Lieut.-Col. W. F., D.S.O., 51st Sikhs (F. F.).

NORMAN, Maj. C. L., M.V.O., Q. V. O. Corps of Guides (specially awarded a silver medal).

1916..CRUM, Maj. W. E., V.D., Calcutta Light Horse.
1917..BLAKER, Maj. W. F., R.F.A.
1918..GOMPERTZ, Capt. A. V., M.C., R.E.
1919..GOMPERTZ, Capt. M. L. A., 108th Infantry.
1920..KEEN, Lt.-Col. F. S., D.S.O., 2/15th Sikhs.
1922..MARTIN, Maj. H. G., D.S.O., O.B.E., R.F.A.
1923..KEEN, Col. F. S., D.S.O., I.A.
1926..DENNYS, Maj. L. E., M.C., 4/12th Frontier Force Regiment.
1927..HOGG, Maj. D. McA., M.C., R.E.
1928..FRANKS, Maj. K. F., D.S.O., 5th Royal Mahrattas.
1929..DENNYS, Maj. L. E., M.C., 4/12th Frontier Force Regiment.
1930..DURNFORD, Maj. C. M. P., 4/6th Rajputana Rifles.
1931..FORD, Lt.-Col. G. N., 2/5th Mahratta Light Infantry.

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(From an officer who succeeded in gaining admission to the Staff College at the 1931 Examination.)

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United Service Institution of India.

OCTOBER 1932.

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I.—New Members.

The following new members joined the Institution from 1st June to 31st August 1932 :—

ORDINARY MEMBERS.

A. C. Badenoch, Esq., C.I.E., I.C.S.
P. C. Bamford, Esq., C.I.E., Indian Police.
W. G. Leys, Esq., Military Accounts Department.
A. H. Lloyd, Esq., C.I.E., I.C.S.
C. V. Salusbury, Esq., I.C.S.
A. F. Wylie, Esq.
Colonel F. Dickins.
Colonel P. W. L. Broke-Smith, D.S.O., O.B.E.
Lt.-Col. S. R. Wason, M.C.
Major R. T. O. Cary, M.B.E.
Major J. J. M. Soutar, O.B.E.
Major H. S. Woods.
Captain T. I. Bate.
Captain A. G. Bennett.
Captain P. C. Bullock.
Captain N. Burgan.
Captain J. H. C. Currie.
Captain S. G. Gardiner.
Captain E. R. Greer.
Captain N. O. Hill.
Captain J. E. Hirst.
Captain R. T. W. Macleod.
Captain E. J. Montgomery.
Captain J. R. Morris.
Captain J. Y. E. Myrtle.
Captain S. F. H. Williams.
Lieut. G. E. R. Bastin.
Lieut. A. Boyce.
Lieut. H. G. Fowler.
Lieut. C. I. V. Jones.
Lieut. N. H. Kindersley.
Lieut. N. M. W. Kyle.
Lieut. H. L. Lendrum.
Lieut. E. McDonald.
2/Lieut. J. C. E. Bowen.
2/Lieut. P. E. H. Latham

II.—The Journal.

The Institution publishes a Quarterly Journal in the months of January, April, July and October, which is issued postage free to members in any part of the world. Non-members may obtain the Journal at Rs. 2 annas 8 per number, or Rs. 10 per annum. Advertisement rates may be obtained on application to the Secretary.

III.—Contributions to the Journal.

Articles may vary in length from two thousand to ten thousand words. Payment is made on publication at from Rs. 40 to Rs. 100 in accordance with the value and length of the contribution.

With reference to Regulations for the Army in India, paragraph 204 and King's Regulations, paragraph 522, action to obtain the sanction of His Excellency the Commander-in-Chief to the publication of any article in the Journal of the United Service Institution of India will be taken by the Executive Committee of the Institution.

The Committee reserve to themselves the right to omit any matter which they consider objectionable.

Articles are only accepted on these conditions.

IV.—Reading Room and Library.

The United Service Institution of India is situated in the Mall, Simla, and is open all the year round—including Sundays—from 9. A. M., until sunset. The Reading Room of the Institution is provided with the leading illustrated papers, newspapers, magazines and journals of military interest.

There is a well-stocked library in the Institution, from which members can obtain books on loan free, in accordance with the following rules :—

(1) The Library is only open to members and honorary members, who are requested to look upon books as not transferable to their friends.

(2) No book shall be taken from the Library without making the necessary entry in the register. Members residing permanently or temporarily in Simla are requested to enter their addresses.

(3) A member shall not be allowed at one time, more than three books or sets of books.

(4) No particular limit is set as to the number of days for which a member may keep a book, the Council being desirous of making the Library as useful as possible to members ; but if after the expiration of a fortnight from date of issue it is required by any other member it will be re-called.

(5) Applications for books from members at out-stations are dealt with as early as possible, and books are despatched post free per Registered Parcel Post. They must be returned carefully packed per Registered Parcel Post within one month of date of issue.

(6) If a book is not returned at the end of one month, it must be paid for without the option of return, if so required by the Executive Committee. Lost and defaced books shall be replaced at the cost of the member to whom they were issued. In the case of lost books which are out of print the value shall be fixed by the Executive Committee, and the amount, when received, spent in the purchase of a new book.

(7) The issue of a book under these rules to any member implies the latter's compliance with the rules, and the willingness to have them enforced, if necessary, against him.

(8) The catalogue of the Library is completed to 31st March 1924. Price Rs. 3-8-0 or postage paid Rs. 3-14-0. An addendum completed up to 30th September 1927 is available. Price annas 8 *plus* postage annas 4.

V.—New Books.

BOOKS RECEIVED.

Title.	*Published.*	*Author.*
The Historical Record of the 4th Bn. 16th Punjab Regiment	.. 1931 ..	
Indian Infantry Colours	.. 1931 ..	Capt. H. Bullock.
The Handbook for the Indian Army Dogras.	1932 ..	Lt.-Col. W. B. Cunningham.
Administrative Schemes with Solutions	.. 1932 ..	S. W. Kirby and C. A. P. Murison.
The Elements of Rifle Shooting	.. 1932 ..	J. A. Barlow.
The Desert Column	.. 1932 ..	I. L. Idriess.
Lectures on F. S. R. III Operations between Mechanized Forces.	1932 ..	Maj.-Genl. J. F. C. Fuller.
Passing it On Short Talks on Tribal Fighting on the N. W. Frontier of India.	1932 ..	Genl. Sir Andrew Skeen.
Military Report on Ceylon	.. 1932 ..	Official.
Military Report on Malaya	.. 1932 ..	,,
A Short History of British Expansion, Part I.	1931 ..	James A. Williamson.
British Documents on the Origins of the War, 1898—1914, Vol. VII.	1932 ..	G. P. Gooch and H. Temperley.
India and the British	.. 1932 ..	Patricia Kendall.
The Statesman's Year-Book	.. 1932	
Marlborough	.. 1932 ..	Sir John Fortescue.

The History of the Russian Revolution, Vol. I.	1932 ..	Leon Trotsky.
Honest Doubt—Or the Price of Modern Politics.	1932 ..	Ernest J. P. Benn.
The Strength of England ..	1926 ..	George W. F. Bowles.
Military Law, 18th edn. ..	1932 ..	Lt.-Col. S. T. Banning.
Military Organization and Administration, 12th edn.	1932 ..	Col. W. G. Lindsell.
Survey of International Affairs ..	1931 ..	Arnold and Toynbee.
Strange Intelligence-Memoirs of Naval Secret Service.	1931 ..	H. C. Bywater and H. C. Ferraby.
Ludendorff—The Tragedy of a Specialist	1932 ..	Karl Tschuppik.
The Game of Politics ..	1932 ..	Phillip G. Cambray.
The Caste System of Northern India ..	1931 ..	E. A. H. Blunt.
The Recovery—The Second Effort ..	1932 ..	Sir Arthur Salter.

BOOKS ON ORDER.

Fear and be Slain ..	.. Seeley.
Last Days of the German Fleet ..	.. Freiwald.
Life of Lord Carson, Vol. I. ..	.. Marjoribanks.

VI.—Books recommended for Staff College and Promotion Examination Students.

The following list of books available in the Library may be found useful for reference by officers studying for Promotion Examinations or entrance to the Staff College. In addition to those enumerated below, there is a large number of books in the Library dealing with Military History, Tactics, Organization, Administration, Military Geography, Languages, etc. Should any member require a book not shown in this list, he should apply to the Librarian, when it will, if procurable, be forwarded to him.

MILITARY HISTORY.

(Before beginning to read Military History, candidates are advised to study carefully Section 9, Training and Manœuvre Regulations, 1923.)

1.—*The Great War, General History.*

Soldiers and Statesmen (Field-Marshal Sir W. Robertson).

The Great War of 1914—18 (Aston).

The World Crisis (Winston Churchill).

At G. H. Q. (Charteris).

The Real War (Liddell Hart).

The Empire at War (4 Vols.) (Lucas).

My War Memories (Ludendorff).

The First World War 1914—1918 (Repington).

General Headquarters, 1914—16, and its Critical Decisions (Falkenhayn).

2.—*The Campaign of the British Army in France and Belgium.*

A.—Official History of the War.

Military Operations, France and Belgium, Vols. I to V.

B.—Other Books.

Forty Days in 1914 (Maurice, new edition).

Ypres, 1914. (An official account) (German General Staff).

Memoirs of Marshal Foch (1931).

Story of the Fourth Army (Montgomery).

The Fifth Army (Gough).

The last Four Months (Maurice).

3.—*The Palestine Campaign.*

A.—Official Accounts.

A Brief Record of the Advance of the Egyptian Expeditionary Force, 1919.

The Official History of the Great War. Military Operations in Egypt and Palestine, Vol I, and Maps (Lieut.-General Sir G. MacMunn).

The Official History, Operations, Egypt and Palestine, from June 17th to the end of the War, Parts I and II, with maps (Capt. Cyril Falls).

B.—Other Books.

The Palestine Campaign (Wavell).

The Revolt in the Desert (T. E. Lawrence).

With the Turks in Palestine (Aaronsohn).

Outline of the Egyptian and Palestine Campaigns, 1914—18 (Bowman—Manifold).

How Jerusalem was Won (Massy).

The Desert Mounted Corps (Preston).

U. S. I. Journal—October 1923 (Captain Channer's article).

4.—*The Dardanelles Campaign.*

A.—Official Accounts.

Naval and Military Despatches ..	A clear account of the operations in detail from the G. H. Q. standpoint.
Report of the Dardanelles Commission.	Fixes responsibility for the inception and conduct of the campaign. An interesting study in the relationship between Politicians and Naval and Military Experts.

Despatches from the Dardanelles (Ian Hamilton).
Official History of the Great War, Gallipoli, May 1915, Vol. I, Vol. II (C. F. Aspinall Oglander).

B.—Other Books.

The Dardanelles (Callwell) ..
Dardanelles Campaign (Nevinson)
The Navy in the Dardanelles Campaign (Wester Wemyss).

5.—*The Mesopotamia Campaign.*

A.—Official Account.

Official History of the Campaign in Mesopotamia, Vols. I to IV, (F. J. Moberly).

B.—Other Books.

Critical Study of the Campaign in Mesopotamia up to April 1917 (Staff College).
The Campaign in Mesopotamia, 1914—18 (Evans).
Notes on the Campaign in Mesopotamia (Kearsey).
A Chapter of Misfortunes.
My Campaign in Mesopotamia (Townshend).
Mesopotamia, 1917—20, Loyalties (Sir A. Wilson).

6.—*Waterloo Campaign.*

Wellington and Waterloo (Arthur Griffiths).
Waterloo, the Downfall of the first Napoleon (George Hooper).
Story of Waterloo (Hutchinson).
Campaign of 1815 (W. H. James).
With Napoleon at Waterloo (E. B. Low).
Napoleon and Waterloo (Becke).
Waterloo (Ropes).
Campaign of 1915, Ligny: Quatre-Bras: Waterloo (W. O'Connor Morris).
Waterloo Campaign (Maguire).
Waterloo Campaign (S. C. Pratt).
Wellington and Waterloo (G. W. Redway).
Wellington's Campaigns. Peninsula-Waterloo, 1808—15, also Moore's.
Campaign of Corunna (C. W. Robinson).
A Study of the Waterloo Campaign ("Tacticus").

7. *Marlborough's Campaigns.*

History of the British Army, Vol. I (Hon. J. W. Fortescue).

Life of John, Duke of Marlborough, Vols. I and II (Archibald Alison).

The Wars of Marlborough, 1702—09 (Frank Taylor).

John Churchill, Duke of Marlborough, Vols. I and II (Viscount Wolseley).

Marlborough and the Rise of the British Army (C. T. Atkinson).

A Short Life of Marlborough (H. J. & E. A. Edwards).

The Battle of Blenheim (Hilaire Belloc).

Marlborough and his Campaigns, 1702—09 (A. Kearsey).

Marlborough : The Portrait of a Conqueror (Chidsey).

Marlborough (Fortescue).

Six British Battles (Belloc).

England under Queen Anne (Trevelyan).

8. *The American Civil War.*

Stonewall Jackson and the American Civil War (G. F. R. Henderson).

History of the Civil War in the United States, 1861—65 (W. B. Wood and J. E. Edmonds).

History of the Campaign of Gen. T. J. (Stonewall) Jackson in the Shenandoah Valley of Virginia (William Allen).

A Study of the Strategy and Tactics of the Shenandoah Valley Campaign, 1861—62 (A. Kearsey).

The American Civil War, 1861—64 (John Formby).

History of the American Civil War (J. W. Draper).

Fredericksburg and Chancellorsville (J. E. Gough).

Battles and Leaders of the Civil War (Johnson and Buell).

Robert E. Lee, The Soldier (Maurice).

Sherman (Liddell Hart).

The Generalship of Ulysses S. Grant (Fuller).

9. *The East Prussian Campaign.*

Tannenberg—First 30 days in East Prussia (Edmund Ironside).

Out of my Life (Von Hindenburg).

My War Memories (Ludendorff).

Tannenberg (Kearsey).

10.—*The Russo-Japanese War*, 1904, *up to and including the Battle of Liao-Yang.*

Lectures on the Strategy of the Russo-Japanese War (Bird).

Questions on the Russo-Japanese War (Brunker).

Official Account: The Russo-Japanese War (Naval and Military), 3 Vols., published by Committee of Imperial Defence.

Outline of the Russo-Japanese War (Ross).

A Study of the Russo-Japanese War (Chasseur).

A Staff Officer's Scrap Book (Hamilton).

Outline History of the Russo-Japanese War, 1904, up to the Battle of Liao-Yang, with Questions and Answers (P. W.).

An Account of the Battle of Liao-Yang (with questions and 10 maps for examination purposes) (Bird).

Short Account of the Russo-Japanese War ("Footslogger").

11. *Napoleon's Italian Campaign*, 1796-97.

Napoleon's Campaign in Italy (Burton).

Encyclopædia Britannica.

ORGANIZATION AND ADMINISTRATION.

12. *Organization of the Army.*

A.—Organization of the Army since 1868.

History of British Army, by Fortescue, Vols. I to XIII.

Outline of the Development of the British Army, by Major-General Sir W. H. Anderson.

Short History of the British Army to 1914 (Sheppard).

The Empire and the Army (Fortescue).

B.—Forces of the Empire.

The Annual Army Estimates of Effective and Non-Effective Services (H. M. Stationery Office).

Notes on the Land Forces of the British Dominions, Colonies, Protectorates and Mandated Territories.

The Statesman's Year Book.

Army List.

C.—Foreign Armies.

League of Nations Handbook, Armaments.

War Office Official Handbooks of Foreign Armies.

13.—*Development and Constitution of the British Empire.*

A.—The British Empire.

The Strength of England (Bowles).
Splendid Adventure (Hughes).
Empire Government (Nathan).
New Imperial Ideals (Stokes).
How Britain is Governed (Ramsay).
Short History of the British Commonwealth (Ramsay).
The Government of the British Empire (Jenks, 1923).
The Foundation and Growth of the British Empire (J. A. Williamson, 1918).
The Beginnings of English Overseas Enterprise (C. P. Lucas, 1917).
Cambridge History of the British Empire (Vols. 1—6).
Short History of British Expansion (Williamson).
Rise of the British Empire (Moncrieff).
The Government of England (L. A. Lowell, 1912).
The Expansion of the British Empire (W. H. Woodward, 1927 edition).
The Origin and Growth of the British Colonies and of Their System of Government (H. E. Egerton, 1903).
The English Constitution (Bagehot, 1909).
England in the Seven Years' War (Sir J. Corbett, 1907).

B.—Books on Special Portions of the Empire or World.

The Rise and Expansion of British Dominion in India (Sir A. O. Lyall, 1894).
General Survey of the History of India (Sir Verney Lovett).
India in 1929-30.
India in 1930-31.
Modern Egypt (Cromer, 1908).
Egypt and the Army (Elgood, 1924).
The History of Canada (W. L. Grant).
Report on British North America (Sir C. P. Lucas).
The Union of South Africa (R. H. Brand, 1909).
History of the Australasian Colonies (Jenks, 1912).
The Lost Possessions of England (W. F. Lord, 1896).
International Relations of the Chinese Empire (H. B. Mosse) (Kelly and Walsh, Shanghai).
What's Wrong with China ? (Gilbert).
Why China Sees Red (Putnam-Weale).

MILITARY GEOGRAPHY.

14.—*Military Geography.*

Naval and Military Geography of the British Empire (Dr. Vaughan Cornish, 1916).
Imperial Military Geography (Capt. D. H. Cole).
Imperial Communications (Wakeley).
Imperial Economy (Major R. J. Wilkinson).
Changing Conditions of Imperial Defence (Cole).
Imperial Military Geography (Lee).
Military Geography of the British Commonwealth (Salt).

TACTICS.

15—*Tactical Problems.*

Common mistakes in the solution of tactical problems and how to avoid them (Lieut.-Colonel A. B. Beauman, 1926).

Historical illustrations to Field Service Regulations, Vol. II (Major E. G. Eady).

Tactical Schemes with Solutions, 1st and 2nd Series (Kirby and Kennedy).

Elementary Tactics or the Art of War, British School (Major R. P. Pakenham-Walsh).

Lectures on F. S. R. III, 1931 (Fuller).

VII.—Schemes.

Efforts are being made to compete with demands for tactical schemes from officers working for the Staff College Examination by introducing as many new schemes as possible. In addition to reprints of several schemes, the Institution is now in possession of the complete set of schemes with solutions set at the 1932 Army Headquarters Staff College Course.

In order to simplify their issue, the schemes have been classified as follows. When ordering members are requested to give the subject of the schemes required.

STAFF COLLEGE SERIES, 1932.

Continuous Exercise No. 1 "Message Writing," with solution	Re. 1/-
Continuous Exercise No. 2 "Order Writing," with solution	,, 1/-
Continuous Exercise No. 3 "Advance Guards," with solution	,, 1/-
Continuous Exercise No. 4 "Appreciation," with solution	,, 1/-
Continuous Exercise No. 5 "Attack Orders," with solution	,, 1/-
Continuous Exercise No. 6 "Defence," with solution	,, 1/-
Continuous Exercise No. 7 "Defence," with solution	,, 1/-
(NOTE.—A copy of the map, which is same for all the above Exercises, can be had on payment of Rs. 2/- extra).	
Strategy and Tactics No. 1, with map and solutions	Rs. 3/8
Strategy and Tactics No. 2, with map and solutions	,, 3/8 (Rs. 1/8 without map which is the same as for S. & T. paper No. 1).

Strategy and Tactics No. 3, with map and solutions	..	Rs. 3 8
Cavalry Exercise, with map and solutions	..	,, 3/8
Tactical Exercise—Night withdrawals, with map and solutions	.. ..	,, 3/8
Mountain Warfare, without map and solutions		,, 1/-

VIII.—Precis of Lectures, etc.

Military History.

The East Prussian Campaign, 1914 (1931)	..	,, 1/8
The Third Afghan War (1931)	.. ..	,, 1/8
The Palestine Campaign, I (1930)	..	,, 1/8
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American Civil War (1930)	.. ..	,, 1/-
The History and Organization of the Empire (1932)	.. ..	,, -/12

Tactical.

Military Evolution and the Influence of Modern Inventions on Warfare (1932)	..	,, -/12
Tactical Lessons of the Great War (1932)	..	,, 1/8
Cavalry, I (1932)	.. ..	,, -/8
Cavalry, II (1932)	.. ..	,, -/8
The Employment of Divisional Cavalry (1930)		,, -/8
Artillery, I (1932)	.. ..	,, -/4
Artillery, II (1932)	.. ..	,, -/4
Engineers, I & II (1932)	.. ..	,, -/12
Tactical Employment of Tanks (1932)	..	,, -/12
Armoured Cars (1930)	.. ..	,, -/8
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Frontier Warfare (1932)	.. ..	,, 1/8
Air Co-operation (1932)	.. ..	,, -/12

Military Law.

Military Law, I (1932)	.. ..	,, -/4
Military Law, II (1932)	.. ..	,, -/4
Military Law, III (1932)	.. ..	,, -/4
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Specimen Military Law Paper (1932)	..	,, 1/-

Organization, Administration and Transportation.

Mobilization (1932)	.. ..	,, -/4
Reinforcements in War (1932)	.. ..	,, -/4
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Movements (1932)	.. ..	,, 1/8

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General.

Notes on Military Writing (1932) ..	,,	-/4
Essay—Specimen Paper (1932) ..	,,	1/-
Hints on Working for Examinations (1930) ..	,,	-/8

IX.—Historical Research.

The U. S. I. is prepared to supply members and units with type-written copies of old Indian Army List pages, at the rate of Rs. 2 per type-written page.

The staff of the Institution is always available to assist units, authors of regimental histories and members by searching the many old military records in the Library on their behalf.

X.—The MacGregor Memorial Medal.

1. The MacGregor Memorial Medal was founded in 1888 as a memorial to the late Major-General Sir Charles MacGregor. The medals are awarded for the best military reconnaissances or journeys of exploration of the year.

2. The following awards are made annually in the month of June :—

(*a*) For officers—British or Indian—silver medal.

(*b*) For soldiers—British or Indian—silver medal with Rs. 100 gratuity.

3. For especially valuable work a gold medal may be awarded in place of one of the silver medals, or in addition to the silver medals, whenever the administrators of the fund deem it desirable. Also the Council may award a special additional silver medal, without gratuity, to a soldier, for especially good work.

4. The award of medals is made by His Excellency the Commander-in-Chief, as Vice-Patron, and the Council of the United Service Institution who were appointed administrators of the Fund by the MacGregor Memorial Committee.

5. Only officers and soldiers belonging to the Army in India (including those in civil employ) are eligible for the award of the medal.*

6. The medal may be worn in uniform by Indian soldiers on ceremonial parades, suspended round the neck by the ribbon issued with the medal.†

**N.B.*—The terms " officer " and " soldier " include those serving in the British and Indian armies and their reserves, also those serving in Auxiliary Forces, such as the Indian Auxiliary and Territorial Forces and Corps under Local Governments, Frontier Militia, Levies and Military Police, also all ranks serving in the Indian States Forces.

† Replacements of the ribbon may be obtained on payment from the Secretary, U. S. I., Simla.

MacGregor Memorial Medal—*concld.*

7. Personal risk to life during the reconnaissance or exploration is not a necessary qualification for the award of the medal; but in the event of two journeys being of equal value, the man who has run the greater risk, will be considered to have the greater claim to the reward.

8. When the work of the year has either not been of sufficient value, or has been received too late for consideration before the Council Meeting, the medal may be awarded for any reconnaissance during previous years considered by His Excellency the Commander-in-Chief to deserve it.

MACGREGOR MEMORIAL MEDALLISTS.

(*With rank of officers and soldiers at the date of the Award*).

1889 .. BELL, Col. M. S., V.C., R.E. (specially awarded a gold medal).
1890 .. YOUNGHUSBAND, Capt. F. E., King's Dragoon Guards.
1891 .. SAWYER, Maj. H. A., 45th Sikhs.
RAMZAN KHAN, Havildar, 3rd Sikhs.
1892 .. VAUGHAN, Capt. H. B., 7th Bengal Infantry.
JAGGAT SINGH, Havildar, 19th Punjab Infantry.
1893 .. BOWER, Capt. H., 17th Bengal Cavalry (specially awarded a gold medal).
FAZAL DAD KHAN, Dafadar, 17th Bengal Cavalry.
1894 .. O'SULLIVAN, Maj. G. H. W., R.E.
MULL SINGH, Sowar, 6th Bengal Cavalry.
1895 .. DAVIES, Capt. H. R., Oxfordshire Light Infantry.
GANGA DYAL SINGH, Havildar, 2nd Rajputs.
1896 .. COCKERILL, Lieut. G. K., 28th Punjab Infantry.
GHULAM NABI, Sepoy, Q. O. Corps of Guides.
1897 .. SWAYNE, Capt. E. J. F., 10th Rajput Infantry.
SHAHZAD MIR, Dafadar, 11th Bengal Lancers.
1898 .. WALKER, Capt. H. B., Duke of Cornwall's Light Infantry.
ADAM KHAN, Havildar, Q. O. Corps of Guides.
1899 .. DOUGLAS, Capt. J. A., 2nd Bengal Lancers.
MIHR DIN, Naik, Bengal Sappers and Miners.
1900 .. WINGATE, Capt. A. W. S., 14th Bengal Lancers.
GURDIT SINGH, Havildar, 45th Sikhs.
1901 .. BURTON, Maj. E. B., 17th Bengal Lancers.
SUNDAR SINGH, Colour Havildar, 31st Burmah Infantry.
1902 .. RAY, Capt. M. R. E., 7th Rajput Infantry.
TILBIR BHANDARI, Havildar, 9th Gurkha Rifles.
1903 .. MANIFOLD, Lieut.-Col. C. C., I.M.S.
GHULAM HUSSAIN, Lance-Dafadar, Q. O. Corps of Guides.
1904 .. FRASER, Capt. L. D., R.G.A.
MOGHAL BAZ, Dafadar, Q. O. Corps of Guides.
1905 .. RENNICK, Maj. F., 40th Pathans (specially awarded a gold medal).
MADHO RAM, Havildar, 8th Gurkha Rifles.
1906 .. SHAHZADA AHMAD MIR, Risaldar, 36th Jacob's Horse.
GHAFUR SHAH, Lance-Naik, Q. O. Corps of Guides Infantry.

MacGregor Memorial Medallists—(*contd.*).

1907 .. Nangle, Capt. M. C., 92nd Punjabis.
Sheikh Usman, Havildar, 103rd Mahratta Light Infantry.
1908 .. Gibbon, Capt. C. M., Royal Irish Fusiliers.
Malang, Havildar, 56th Punjab Rifles.
1909 .. Muhammad Raza, Havildar, 106th Pioneers.
1910 .. Sykes, Maj. P. M., C.M.G., late 2nd Dragoon Guards (specially awarded a gold medal).
Turner, Capt. F. G., R.E.
Khan Bahadur Sher Jung, Survey of India.
1911 .. Leachman, Capt. G. E., The Royal Sussex Regiment.
Gurmukh Singh, Jemadar, 93rd Burmah Infantry.
1912 .. Pritchard, Capt. B. E. A., 83rd Wallajahabad Light Infantry (specially awarded a gold medal).
Wilson, Lieut. A. T., C.M.G., 32nd Sikh Pioneers.
Mohibulla, Lance-Dafadar, Q. V. O. Corps of Guides.
1913 .. Abbay, Capt. B. N., 27th Light Cavalry.
Sirdar Khan, Sowar, 39th (K. G. O.), Central India Horse.
Waratong, Havildar, Burmah Military Police (specially awarded a silver medal).
1914 .. Bailey, Capt. F. M., I.A. (Political Department).
Morshead, Capt. H. T., R.E.
Haidar Ali, Naik, 106th Hazara Pioneers.
1915 .. Waterfield, Capt. F. C., 45th Rattray's Sikhs.
Ali Juma, Havildar, 106th Hazara Pioneers.
1916 .. Abdur Rahman, Naik, 21st Punjabis.
Zarghun Shah, Havildar, 58th Rifles (F. F.) (specially awarded a silver medal).
1917 .. Mian Afraz Gul, Sepoy, Khyber Rifles.
1918 .. Noel, Capt. E. W. C. (Political Department).
1919 .. Keeling, Lieut.-Colonel E. H., M.C., R.E.
Alla Sa, Jemadar, N. W. Frontier Corps.
1920 .. Blacker, Capt. L. V. S., Q. V. O. Corps of Guides.
Awal Nur, C. Q. M. Havildar, 2nd Bn., Q. V. O. Corps of Guides. (Special gratuity of Rs. 200.)
1921 .. Holt, Maj. A. L., Royal Engineers.
Sher Ali, Sepoy No. 4952, 106th Hazara Pioneers.
1922 .. Abdul Samad Shah, Capt., O.B.E., 31st D.C.O. Lancers.
Nur Muhammad, Lance-Naik, 1st Guides Infantry, F. F.
1923 .. Bruce, Capt. J. G., 2/6th Gurkha Rifles.
Sohbat, Head Constable, N.-W. F. Police.
Hari Singh, Thapa, Survey Department (specially awarded a silver medal).
1924 .. Rahmat Shah, Havildar, I.D.S.M., N.-W. F. Corps.
Ghulam Hussain, Naik, N.-W. Frontier Corps.
1925 .. Spear, Capt. C. R., 5/13th Frontier Force Rifles.
Jabbar Khan, Naik, 5/13th Frontier Force Rifles.
1926 .. Harvey-Kelly, Maj. C. H. G. H., D.S.O., 4/10th Baluch Regiment.
1927 .. Lake, Maj. M. C., 4/4th Bombay Grenadiers.

MacGregor Memorial Medallists—(*concld.*).

1928 .. Bowerman, Capt. J. F., 4/10th D. C. O. Baluch Regiment.
Muhammad Khan, Havildar, Zhob Levy Corps.
1929 .. Abdul Hanan, Naik, N.-W. F. Corps (with gratuity of Rs. 100).
Ghulam Ali, Dafadar, Guides Cavalry (specially awarded a silver medal).
1930 .. Green, Capt. J. H., 3/20th Burma Rifles.
1931 .. O'Connor, Capt. R. L., 1/9th Jat Regiment.
Khial Badshah, Naik, 1/12th Frontier Force Rifles.
1932 .. Birnie, Capt. E. St. J., Sam Browne's Cavalry.
Shib Singh Negi, No. 4013 Rifleman, 10/18th Royal Garhwal Rifles.

UNITED SERVICE INSTITUTION OF INDIA.

Prize Essay Gold Medallists.

(*With Rank of Officers at the date of the Essay.*)

1872 .. Roberts, Lieut.-Col. F. S., v.c., c.b., r.a.
1873 .. Colquhoun, Capt. J. S., r.a.
1874 .. Colquhoun, Capt. J. S., r.a.
1879 .. St. John, Maj. O. B. C., r.e.
1880 .. Barrow, Lieut. E. G., 7th Bengal Infantry.
1882 .. Mason, Lieut. A. H., r.e.
1883 .. Collen, Maj. E. H. H., s.c.
1884 .. Barrow, Capt. E. G., 7th Bengal Infantry.
1887 .. Yate, Lieut. A. C., 27th Baluch Infantry.
1888 .. Maude, Capt. F. N., r.e.
Young, Maj. G. F., 24th Punjab Infantry (specially awarded a silver medal).
1889 .. Duff, Capt. B., 9th Bengal Infantry.
1890 .. Maguire, Capt. C. M., 2nd Cavy., Hyderabad Contingent.
1891 .. Cardew, Lieut. F. G., 10th Bengal Lancers.
1893 .. Bullock, Maj. G. M., Devonshire Regiment.
1894 .. Carter, Capt. F. C., Northumberland Fusiliers.
1895 .. Neville, Lieut.-Col. J. P. C., 14th Bengal Lancers.
1896 .. Bingley, Capt. A. H., 7th Bengal Infantry.
1897 .. Napier, Capt. G. S. F., Oxfordshire Light Infantry.
1898 .. Mullaly, Maj. H., r.e.
Clay, Capt. C. H., 43rd Gurkha Rifles (specially awarded a silver medal).
1899 .. Neville, Col. J. P. C., s.c.
1900 .. Thuillier, Capt. H. F., r.e.
Lubbock, Capt. G., r.e. (specially awarded a silver medal).
1901 .. Ranken, Lieut.-Col. G. P. P., 46th Punjab Infantry.
1902 .. Turner, Capt. H. H. F., 2nd Bengal Lancers.
1903 .. Hamilton, Maj. W. G., d.s.o., Norfolk Regiment.
Bond, Capt. R. F. G., r.e. (specially awarded a silver medal).
1904 .. Macmunn, Maj. G. F., d.s.o., r.f.a.
1905 .. Cockerill, Maj. G. K., Royal Warwickshire Regiment.

PRIZE ESSAY GOLD MEDALLISTS—(*concld.*).

1907 .. WOOD, Maj. E. J. M., 99th Deccan Infantry.
1908 .. JEUDWINE, Maj. H. S., R.A.
1909 .. MOLYNEUX, Maj. E. M. J., D.S.O., 12th Cavalry.
ELSMIE, Maj. A. M. S., 56th Rifles, F. F. (specially awarded a silver medal).
1911 .. Mr. D. PETRIE, M.A., Punjab Police.
1912 .. CARTER, Maj. B. C., The King's Regiment.
1913 .. THOMSON, Maj. A. G., 58th Vaughan's Rifles (F. F.).
1914 .. BAINBRIDGE, Lieut.-Col. W. F., D.S.O., 51st Sikhs (F. F.).
NORMAN, Maj. C. L., M.V.O., Q. V. O. Corps of Guides (specially awarded a silver medal).
1916 .. CRUM, Maj. W. E., V.D., Calcutta Light Horse.
1917 .. BLAKER, Maj. W. F., R.F.A.
1918 .. GOMPERTZ, Capt. A. V., M.C., R.E.
1919 .. GOMPERTZ, Capt. M. L. A., 108th Infantry.
1920 .. KEEN, Lt.-Col. F. S., D.S.O., 2/15th Sikhs.
1922 .. MARTIN, Maj. H. G., D.S.O., O.B.E., R.F.A.
1923 .. KEEN, Col. F. S., D.S.O., I.A.
1926 .. DENNYS, Maj. L. E., M.C., 4/12th Frontier Force Regiment.
1927 .. HOGG, Maj. D. McA., M.C., R.E.
1928 .. FRANKS, Maj. K. F., D.S.O., 5th Royal Mahrattas.
1929 .. DENNYS, Maj. L. E., M.C., 4/12th Frontier Force Regiment.
1930 .. DURNFORD, Maj. C. M. P., 4/6th Rajputana Rifles.
1931 .. FORD, Lt.-Col. G. N., 2/5th Mahratta Light Infantry.
1932 .. THURBURN, Lt. R. G., The Cameronians (Scottish Rifles).

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